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ABSTRACT

The divergent cultural patterns, philosophies of education, and basic structures of government in Japan and the United States have resulted in distinct differences between the educational systems of the two countries. The national government strictly regulates all aspects of Japanese education (including student achievement levels and the competencies taught in training programs), whereas education in the United States is characterized by relatively low levels of federal intervention. About 50 percent of the material covered by Japanese vocational students is on general academic subjects; vocational programs in the United States focus largely on specific technical skills. The Japanese government provides financial assistance directly to educational institutions, which in turn require lower tuition rates from students than those required in the United States. Unlike Japan, the United States supplies significant amounts of educational assistance through government guaranteed loans. A survey of a sample of 100 Texas student loan recipients indicated failure to find a well-paying job in one's field of training and the perception that the education received was not worth the money as two reasons why many student loans are not repaid. (The survey questionnaire is appended, the bibliography lists 60 references, and 18 tables and 16 figures are included.) (MN)

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Lyndon B. Johnson School of Public Affairs
Policy Research Project Report
Number 100

Vocational Education in Japan and Texas

A report to the Japan-United States Friendship Commission and the Texas Guaranteed Student Loan Corporation

**A report by the
Policy Research Project on Fighting Crime
and Improving Education in Japan and Texas
The University of Texas at Austin**
1992

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Policy Research Project Participants

Students

Bob Behrens, B.A. (Criminal Justice), The University of Texas at San Antonio
Scott Clarke, B.A. (Political Science), University of Washington
John Garvin, B.S. (Business Economics), Bentley College
Michael Henderson, B.A. (Geography), The University of Texas at Austin
David Jacobs, B.A. (Journalism/International Politics), Park College
James C. Simms II, B.A. (International Studies), American University
Matthew Steiner, B.A. (Government), The University of Texas at Austin
Vikki Vondracek, B.A. (Marketing), The University of Texas at Austin

Research Assistants

Michael Duke, M.A. (Anthropology), The University of Texas at Austin
Kathleen Smith, B.A. (Anthropology), Bryn Mawr

Editorial Assistance

Pamela Hormuth, B.A., Social Science Research Associate, School of Social Work

Project Directors

Robert Rickards, Ph.D., Assistant Professor, Lyndon B. Johnson School of Public Affairs
Laura Lein, Ph.D., Senior Lecturer, Anthropology and School of Social Work

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Foreword

The Lyndon B. Johnson School of Public Affairs has established interdisciplinary research on policy problems as the core of its educational program. A major part of this program is the nine-month policy research project, in the course of which two or three faculty members from different disciplines direct the research of ten to twenty graduate students of diverse backgrounds on a policy issue of concern to a governmental agency. This "client orientation" brings the students face to face with administrators, legislators, and other officials active in the policy process, and demonstrates that research in a policy environment demands special talents. It also illuminates the occasional difficulties of relating research findings to the world of political realities.

The study was designed to explore and compare the vocational education systems of Japan and the U. S. This report represents the results of analysis of the policies and regulations controlling vocational education in Japan and the United States. The findings should suggest new policies to improve the delivery and assessment of vocational education programs.

The curriculum of the LBJ School is intended not only to develop effective public servants but also to produce research that will enlighten and inform those already engaged in the policy press. The project that resulted in this report has helped to accomplish the first task; it is our hope and expectation that the report itself will contribute to the second.

Finally, it should be noted that neither the LBJ School nor The University of Texas at Austin necessarily endorses the views or findings of this study.

Max Sherman
Dean

Preface

This report presents findings from a project conducted during the 1990-1991 academic year by faculty and students in the Lyndon B. Johnson School of Public Affairs and the School of Social Work at The University of Texas at Austin. The project's sponsors were the Japan-United States Friendship Commission and the Texas Guaranteed Student Loan Corporation. The overall project involved five interrelated activities. First, it helped train American graduate students for public-sector careers involving Japan. Second, as part of that training, it compared and contrasted vocational education policies in Japan and Texas. Third, it surveyed 100 former vocational education students to discover causes of the high default rate in the Texas Guaranteed Student Loan program. Fourth, the project brought the participating graduate students together with Japanese and Texas officials responsible for education policymaking. Fifth, it continued and expanded both the exchange of public-sector internships and existing institutional ties between Japan and Texas.

Ten public affairs graduate students enrolled in the year-long course associated with the project. The course familiarized those students with the main aspects of Japan's history, culture, society, economy, and government. In addition, as part of the course, the students: (1) examined the Japanese and American educational systems in general; (2) investigated options in, as well as control of, financing and certification of vocational education in Japan and the United States; (3) designed and executed a questionnaire on student loan defaulters in Texas, and (4) analyzed the results.

Two participating graduate students also served in internships with Japanese municipal and prefectural governments. During the summer of 1991, one intern worked on Mayor Yasumoto Tajiri's staff in Kumamoto City, while another intern served on Governor Morihiko Hiramatsu's staff in Oita Prefecture. In return, Governor Hiramatsu sent Yasuhiro Sato to Austin. A staff member of the International Section of Oita Prefecture's government, Mr. Sato, immediately undertook an intensive English-language refresher course. Next, he attended the Texas Governor's Executive Training Program at the Lyndon B. Johnson School of Public Affairs. Thereafter, Mr. Sato served a three-month internship in the Texas Department of Agriculture. Finally, throughout his half-year stay in Austin, Mr. Sato also was a regular participant in this Japan-Texas policy research project.

Beyond coursework and continuation of the internship exchange program, the project had four more noteworthy accomplishments. First, it brought project participants together with officials and board members of the Texas Guaranteed Student Loan Corporation. On those occasions, students reported preliminary survey results and exchanged views with professionals on reforming vocational education in Texas. Second, the project supported preparations for Austin Mayor Lee Cook's initial sister-city visit to Oita City. Third, the project invited a dozen

Japanese government officials, scholars, and policy experts to campus as guest lecturers, several of whom also made hour-long broadcasts in KUT-FM's "Asian Communique" radio series. These lectures and broadcasts further heightened interest in Japan, both on campus and in Central Texas. Fourth, the project continued to help with the acquisition of additional Japanese-language texts and statistical yearbooks for the Asian Collection of the University of Texas at Austin's Library. Funding for these acquisitions came from unspent money the Japan-United States Friendship Commission had supplied in connection with the 1989-1990 Japan-Texas policy research project.

Executive Summary

Recently, the Berlin Wall came down, International Communism collapsed, and the Cold War ended. Consequently, Americans no longer feel threatened by Soviet military power. Instead, they increasingly are beginning to fear Japanese economic power.

At the root of both fears lies the perception that the American educational system has not kept pace with its competitors. In the 1950s, Sergei's ability to outperform Johnny in math and science gave the Soviet Union a threatening advantage in space and military technology. In the 1990s, Saburo's ability to outperform Johnny in math and science gives Japan a threatening advantage in industrial competitiveness.

The project report presents information on and analysis of vocational education policy in Japan and Texas. The purpose of this analysis is to raise the level of official and popular awareness about major issues in the vocational education policy area. This awareness is essential for making informed decisions about the costs and benefits of reforming vocational education in the U. S. generally and in Texas in particular. Accordingly, chapters 1 and 2 approach the problem of vocational education policy reform somewhat differently.

Chapter 1 begins with an overview of the Japanese and American educational systems. It places them in their larger historical, social, and cultural contexts, while supplying basic information on enrollment patterns, motivations to seek education, teachers' and students' respective roles, and entrance examinations for post-secondary education. Next, the chapter examines the educational options available to Japanese and American students besides traditional four-year institutions and company training: vocational high schools, community and technical colleges, and proprietary training schools. After describing some similarities in the Japanese and American educational structures, the chapter then notes differences in the locus of policymaking power within them. These differences have important consequences for the financing and standardization of education in both countries. In exploring funding issues, the chapter focuses on the level and form of government support for education, as well as who receives it. In discussing certification issues, the chapter pays special attention to curriculum requirements, certifying institutions, and the content of tests used to measure student knowledge. The chapter closes with a brief summary of its main findings.

One key finding is that guaranteed student loans are a major source of money to pay for vocational education in the United States. Chapter 3 searches for the causes of the extraordinarily high default rate associated with those loans. It opens with a short history of federally guaranteed student loan programs before reviewing relevant literature on the loan default problem. The main debate in the literature turns out to be whether students or vocational schools are chiefly to blame. The balance of the chapter describes a survey designed and executed to resolve this

debate. Following explanation of the methodology employed and discussion of the respondents' representativeness, analysis of the survey's results addresses three crucial questions. First, to what extent do students feel pressured to enroll in a given program or school? Second, how well informed are they about the basic details of guaranteed student loan programs? Third, what are some of the chief outcomes of vocational education programs in Texas?

Chapter 4 concludes the study by suggesting that policymakers reflect on three sets of differences affecting the quality of vocational education in Japan and the United States. These differences pertain to the degree of national oversight, the emphasis given general academic subjects relative to training in specific skills, and how government supplies financial assistance for education.

This policy research project report compares and contrasts education policy in Japan and the United States. In doing so, it pays particular attention to vocational education and produces some noteworthy findings pertaining to that policy area. Chief among them are the following:

Relative to their American counterparts, Japanese students work harder and score higher on standardized achievement tests. At the same time, though, the pressure on Japanese students to succeed at school has high social and psychological costs.

To ensure that its high level of investment in vocational high schools, community and technical colleges, and proprietary training schools pays off, the Japanese government closely supervises them. By comparison, the United States government invests considerably less in human resources. Furthermore, its oversight of education is rudimentary at best. As a result, students often receive an education that does not reflect the local labor market's needs. In addition, the quality of American graduates' skills varies widely.

Private educational institutions are relatively more important in Japan than in the United States. Nationwide qualifying exams help ensure that graduates from both private and public institutions have mastered academic subjects as well as technical skills.

Funding sources for education are more diverse in the United States than in Japan. While the Japanese government generally supports educational institutions directly, the American government provides much of its assistance indirectly through students. A large portion of the American government's educational assistance takes the form of guaranteed student loans. Not only government, but also families, spend more on education in Japan. Moreover, Japanese family spending tends to come from accumulated savings rather than government-guaranteed loans to students.

Thanks to uniform curricular requirements and testing standards, Japanese vocational certificates are good indicators of their holders' abilities. Without comparable requirements and standards, most American vocational certificates are meaningless.

Given vocational education institutions' financial dependence on guaranteed student loans, the uneven quality of the skills they impart, and the poor match between those skills and labor market needs that sometimes results, many students are unable to find work and repay their loans.

Chapter 1. The Japanese Educational System: A Contrast to the U.S. System

Overview of the Japanese Educational System

Beginning with the Meiji restoration of 1868 and formalized by the Imperial Rescript of Education in 1890, education has been a powerful tool of the Japanese government. The oligarchies who lobbied for the Rescript wanted to create a better "sense of nation," or *kokutai*.[1] Accordingly, the Rescript focused on promoting civil morality, a filial relationship between children and their parents, and reverence for the emperor. Even today, the 1890 Rescript continues to serve as the foundation for the structure of Japanese education.

A second major influence on Japanese education was the American military occupation after World War II. Between 1947 and 1950, occupation forces helped Japan establish a new educational system. Modeled after that of the United States, the system provides students with nine years of compulsory education. Of these nine years, pupils spend six in elementary school and three in lower secondary school. In practice, 99.9 percent of Japanese students between the ages of 6 and 15 complete the nine years of compulsory education. This figure reflects students attending both private and public schools.[2]

The number of students voluntarily continuing their education gradually increased in the post-World War II decades (table 1.1). In the 1950s, approximately 50 percent of Japanese 15-year-olds continued their education, compared to 94 percent by 1980. An additional three years of high school are optional.[3] Thus, only 6 percent of Japanese students do not continue their education beyond ninth grade. The age that a student legally can leave school in Japan is 15 (16 in the United States). However, Japanese students tend to remain in the educational system longer. In fact, in the United States just 80 percent of students continue schooling after age sixteen.[4]

Incentives and Guidelines

Established in 1871, the Ministry of Education (*Mombusho*) has the responsibility of educating the entire Japanese population. Less than 20 years before its establishment, Japan had its first contact with the West since the early 1600s. The government's top priority was to change Japan from a feudal nation to a modern power. The goal of the Ministry of Education in creating the national education system was the eradication of feudalism.[5]

Table 1.1. Enrollment Rates of Japanese School Children from 1950 to 1987

	Kinder-garten (%)	Ele-mentary (%)	Junior High (%)	Senior High (%)	Higher Education (%)
1950	8.9	99.64	99.20	42.5	-
1955	20.1	99.77	99.92	51.5	10.1
1960	28.7	99.82	99.93	57.7	10.3
1965	41.3	99.81	99.91	70.7	17.0
1970	53.8	99.83	99.89	82.1	23.6
1975	63.5	99.91	99.91	91.9	37.8
1980	64.4	99.98	99.98	94.2	37.4
1985	63.7	99.99	99.99	94.1	37.6
1987	63.6	99.99	99.98	93.9	36.1

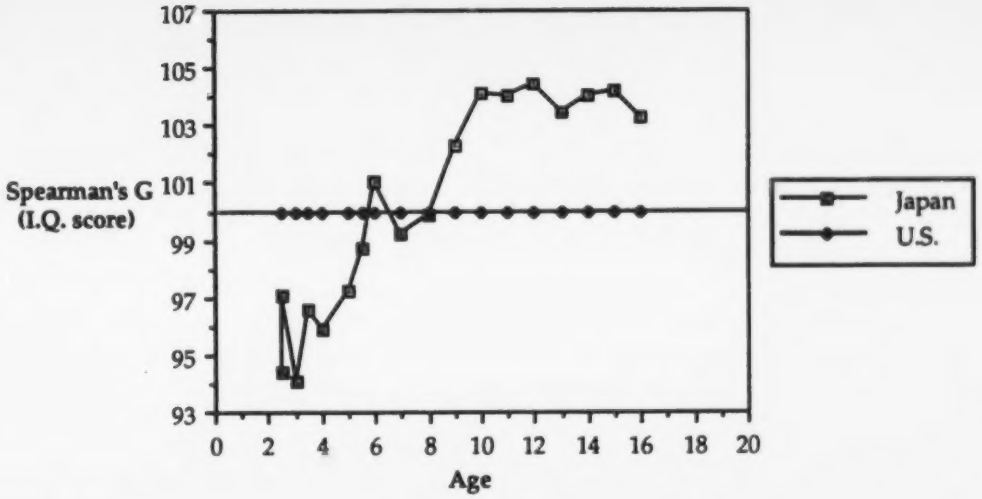
Source: Ministry of Education, *Outline of Education in Japan* (1987), p. 3.

The education system contributed not only to the end of feudalism, but also produced a highly informed and intelligent population. International studies of preschool age children show relatively few differences in intelligence, as measured by IQ scales, between Japan and Western countries (figure 1.1).[6]

> At the age of two years Japanese infants obtain a mean IQ of 94.4, and this is significantly lower than the mean of 100 of white American infants. From the ages of three onwards it appears that Japanese scores steadily improve. Between the ages of 3 1/2 and 9 years there are no significant differences between Japanese and white American children, while from the age of 10 years upwards Japanese children obtain higher scores. Looking at the age trends of Japanese children, it is clear that they start with lower general intelligence than American children, gradually catch up and then surpass American children from the age of 10 years.[7]

Further study in this area revealed that the test scores of Japanese teenagers surpass Western teenagers' scores by over one standard deviation. In other words, the average 12-year-old in Japan scores as high on intelligence tests as the average 15-year-old in the West.[8]

Figure 1.1 Mean IQs of Japanese Children in Relation to American Means of 100



Source: R. Lynn, *Educational Achievement in Japan* (New York: M.E. Sharpe, 1988).

The pressure to gain admission into high school and college spurs Japanese school children in their academic progress. Because the Japanese government provides just nine years of compulsory education, pupils must compete for admission into high school. Japanese people refer to the pressure put on 14-year-old pupils as "examination hell." Pupils attend both their regular school and evening cram schools (*juku*), where they study for an additional three or four hours every day.

The rivalry among junior high school pupils to enter the high schools of their choice is, in part, preparation for the future. High school students face even more intense competition for college and university placement. That is why 50 percent of all high school students in Japan also attend *juku*. Time spent at *juku* combined with that spent on homework and independent study leaves Japanese students little extra time for sleep. Indeed, a popular saying in Japan is that a high school student who gets more than four hours of sleep per night is bound for failure. The amount of time spent studying at school and at *juku* reveals how important college entrance examinations are to students. In *The Japanese Mind*, Robert C. Christopher states,"Every Japanese youngster knows that the status he ultimately achieves in life will be heavily — often, in fact, almost entirely — determined by what university he manages to get into."[9]

Japanese parents spend a large proportion of family income on their children's education. As explained later in the section on financing education, costs

incurred to send youngsters to *juku* alone run quite high. However, for many families, the substantial expenses of education begin even earlier in the preschool years. Currently, 70 percent of Japanese families send their children to private kindergartens.[10]

Japanese parents spend time as well as money on their children's education. The Japanese term *Kyoiku mama,* "education-mama," describes the devotion of Japanese mothers to their children's educational achievement. Japanese men often consider potential ability as education-mamas seriously in selecting their future wives. As W.K. Cummings says in *Education and Equality in Japan,*

> The anxieties of Japanese parents for the cognitive achievement of their children easily outdistances that of American parents. Attitude surveys in Japan show that when Japanese men are asked to rate the qualities they look for in a wife they give devotion to their children's education a very high ranking.[11]

Japanese mothers read to their youngsters and help with homework more than their American counterparts. For example, Richard Lynn notes that, "Japanese mothers helped their children with homework for an average of 24 minutes a day for 6-year-olds and 19 minutes a day for 10-year-olds; in the case of American mothers these figures were 14 and 15 minutes a day."[12] Moreover, Japanese mothers judge their children's schools critically. The majority of Japanese mothers do not think their schools are satisfactory. In comparison, 91 percent of mothers surveyed in the United States considered the schools to be doing a good job of educating their children (table 1.2). In Japan, however, only 39 percent of mothers gave schools a favorable rating.

Teachers and Students

Japanese teachers play a distinctive role in the educational system. The Ministry of Education requires them to make at least one home visit to each student's house annually.[13] It expects such visits to give the teacher a better perspective on the student's life outside school and thereby help the teacher understand each student's needs.

In meeting those needs, teachers also provide moral education in class. The Ministry of Education encourages teachers to play a central role in molding Japanese students' behavior. Kazuo Ishizaka explains, "School teachers in Japan are expected to be much more than mere conveyors of knowledge; they should also be role-models respected by students as well as by many parents. In order to show respect, Japanese usually call a school teacher *sensei* (literally, born ahead). This term is also widely used for any person of respected status such as a medical doctor or lawyer."[14]

Table 1.2. Comparison of Mothers' Attitudes to Children's Abilities and the Effectiveness of Schools in Japan and the United States

Mothers' ratings	Japan	United States
Child's Ability	5.5	6.3
Child's Math Achievement	5.8	5.9
Satisfactory Academic Performance	5.0	4.2
School's Doing Good Job	3.9	9.1
Importance of Effort	5.3	3.9
Importance of Ability	2.3	3.3

Source: *Mathematics Achievement of Chinese, Japanese and American Children,* Stevenson (1983) p. 291-292.

Note: The scale for making these evaluations ran from "much below average" = 0 to "average" = 5 to "much above average" = 9.

Early in life, Japanese children learn Confucian beliefs such as reverence for parents and respect for teachers. The teachers utilize that "built-in" respect in the classroom. Most teachers conduct classes of 40 to 50 students. Student respect enables the teacher to control such a large class with little or no interruption from students. In the United States, teachers usually have smaller classes. Yet American students lack the same degree of respect for teachers. Furthermore, teachers in the United States expect students to interrupt with questions and comments.

Japanese college students spend a little less of each day during their academic year on school work than do American students (table 1.3). However, the Japanese academic year is 240 days long in comparison to 180 days in the United States.[15] Thus, Japanese students at this level devote many more hours per year to school work than do their American counterparts.

In addition, students in the United States do not spend as much time on homework, or school work, as Japanese students. Richard Lynn states, "As compared with Britain and the United States, Japanese children are devoting about 25 to 50 percent more time to school work, while among 16- to 18-year-olds the time spent on homework is apparently some thirteen times greater than that of American adolescents."[16] Consequently, not only do American teachers enjoy less respect and control over their classes in presenting material, but American students spend much less time trying to absorb it.

Table 1.3. Time Devoted to School Work in Different Countries

Country	Days per Year	Hours per day	Hours per year
Australia	200	5.4	1,080
Belgium	200	5.6	1,120
England	180	5	900
Finland	194	6	1,164
France	155	5	775
Germany FR	230	4	920
Hungary	200	5	1,000
Israel	210	5	1,050
Italy	195	5.8	1,131
Japan	**240**	**4.6**	**1,104**
Netherlands	200	5.6	1,120
New Zealand	195	5.4	1,053
Scotland	200	5.4	1,080
Sweden	180	6	1,080
USA	**180**	**5**	**900**

Source: R. Lynn, *Educational Achievement in Japan* (New York: M.E. Sharpe, 1988), p. 115.

Exams and After

Students' success in passing entrance examinations directly reflects on teachers' abilities. As Richard Lynn says, "The remarkable economic development in Japan has caused the quantitative expansion of education. In this climate, competition for schools and universities has been intensified. Most school teachers, parents and students, whether they want to or not, are involved in an educational process where excessive emphasis is placed on intellectual training and on the value of test scores."[17] Results of the college entrance examinations receive widespread coverage in the media. While newspapers do not publish the actual test scores, they do publish the names of students accepted into the top twenty universities in Japan. In doing so, the newspapers report the name of the high school each student attends.

College admission tests are different in the United States and Japan. The Scholastic Aptitude Test (SAT) used in the United States is a test of *aptitude* and *potential* rather than of academic knowledge. The individuals who construct the SAT describe the test as follows:

> The SAT is not a measure of subject matter attainment such as the typical educational achievement test in biology or American history... The SAT measures developed abilities of verbal and mathematical reasoning and comprehension that are acquired gradually over many years of experience and used in both school and non-school settings.[18]

In contrast, Japanese colleges and universities admit students who demonstrate *knowledge* of an academic discipline such as physics, history, or mathematics.

College life itself represents a reduction in pressure because Japanese colleges and universities admit two out of three applicants. Once admitted, students experience an immense feeling of relief. As Robert C. Christopher puts it, "Once the dreaded entrance exams are behind them, it is commonplace for Japanese youngsters to suffer a psychological letdown and slack off in their study habits."[19]

Although many college students do slack off in their studies, penalties are not severe. Companies consider primarily what college or university the applicant attended rather than academic performance. Professor Masaki Yamamoto clarifies, "The obvious difference between the United States and Japan in this regard is that in the United States students work much harder in college."[20] Accordingly, in the United States performance in college is the criterion on which companies base hiring decisions.

The Japanese educational system thus stands in marked contrast to the American educational system. Japanese students score higher on IQ tests and work much harder in school — except for the college years — than do students in the United States. However, accompanying this harder work is a great amount of pressure on junior and senior high school students. Many Japanese parents and teachers believe that such pressure and the stress related to passing entrance exams is not psychologically healthy. In fact, critics point out that school-related suicide is more prevalent in Japan than in the United States.[21] The highly successful Japanese educational system apparently has considerable social and psychological costs.

Notes

[1]Carol Gluck, *Japan's Modern Myths* (Princeton: Princeton University Press, 1985), p. 36-37.

[2]Richard Lynn, *Educational Achievement in Japan* (New York: M.E. Sharpe, 1988), p. 23.

[3]Kazuo Ishizaka, *School Education in Japan* (Tokyo: International Society for Educational Information Inc., 1988), p. 1.

[4]Ibid., p. 48.

[5]Carol Gluck, *Japan's Modern Myths*, p. 121.

[6]Richard Lynn, *Educational Achievement in Japan*, p. 17.

[7]Ibid., p. 57.

[8]Ibid., p. 17.

[9]Robert C. Christopher, *The Japanese Mind* (New York: Fawcett Columbine, 1983), p. 83.

[10] Richard Lynn, *Educational Achievement in Japan*, p. 20.

[11]W.K. Cummings, *Education and Equality in Japan* (Princeton, 1980), p. 115.

[12]Richard Lynn, *Educational Achievement in Japan*, p. 89.

[13]Ibid., p. 134.

[14]Kazuo Ishizaka, *School Education in Japan*, p. 18.

[15] Richard Lynn, *Educational Achievement in Japan*, p. 114.

[16]Ibid., p. 119.

[17]Ibid., p. 163.

[18]Ibid., p. 149.

[19]Robert C. Christopher, *The Japanese Mind*, p. 92.

[20]Statements of Masaki Yamamoto, Professor of Circuit Engineering, Osaka Industrial University, February 6, 1991.

[21]Richard Lynn, *Educational Achievement in Japan*, p. 125.

Chapter 2. Vocational Education in Japan and the United States

Japanese Vocational Education

In Japan, two national agencies provide and supervise the framework for vocational education and training. First, the Ministry of Education governs most of the schools that provide vocational education for Japanese youth. Second, the Ministry of Labor plays a supplemental role, operating certain types of vocational training programs designed for adult students. In the United States, in contrast, local governments administer most vocational programs. However, the federal government distributes funds to the states with guidelines for the use of this money.

The Vocational Training Law of 1969 (VTL) defines the roles of the various parties involved in Japanese vocational education. The most salient feature of this law is the significant responsibility it delegates to private industry. As a result, industry provides about 75 percent of all vocational education and training in Japan.[1] Of the remaining 25 percent, public and private educational facilities established by the Ministry of Education share a mandate with institutions run by the Ministry of Labor. The Ministry of Education oversees vocational schools in the upper secondary schools, technical colleges, and special training schools, as well as a range of other types of trade schools. Meanwhile, the Ministry of Labor supervises vocational training centers and skill development centers outside the Ministry of Education's control.

U.S. Vocational Education

Vocational and training education in the United States is similar to that in Japan in that industry also has a large role in teaching and training the labor force. For example, American employers spend about $30 billion annually on formal training for their workers, although only a portion of this funding supports vocational education.[2] Of this $30 billion, community colleges and technical institutes receive about $1.4 billion and vocational and other schools receive about $760 million.[3]

The federal government plays a significant role too. The federal government created two programs to coordinate vocational education: the 1982 Jobs Training Partnership Act (JTPA) and the 1984 Carl D. Perkins Vocational Education Act. The JTPA and the Perkins Act coordinate manpower-training programs intended to address particular social and economic needs. Public and private schools, coordinated by the states, municipal, and school districts, supply the remaining vocational education and training (table 2.1). However, compared to Japan, vocational education in the United States lacks the single vision provided by a national agency like the Japanese Ministry of Education.

Table 2.1. Vocational Education in the United States

Type of Institutions	Number of Institutions	Number of Students (in millions)
Public		
General high schools	15,729	
Vocational high schools	225	9.3
Area vocational centers	1,395	
Community colleges/technical institutes	1,190	6.3
Skill centers	70	
Total Public Schools	18,609	15.6
Private		
Secondary schools	586	
Post secondary institutions	6,813	1.5
Correspondence	83	
Total Private Schools	7,482	1.5
Total All Schools	26,091	17.1

Source: L. Cantor, *Vocational Education and Training in the Developed World* (New York: Routledge, 1989), p. 74.

Administration of Vocational Education and Training in Japan and the United States

The vocational education systems of Japan and the United States have similar organizational structures. However, the differences between the countries' approaches to educational administration are significant. In the United States, there is a high degree of local control over the administration of education. In Japan, however, the concern for standardization in education is paramount. Accordingly, the United States has developed a decentralized educational system, while the Japanese have established a relatively centralized one.

Nevertheless, a certain rough resemblance exists between the educational systems of Japan and the United States. It stems from the post-World War II American occupation of Japan. In endeavoring to democratize Japanese education, American reformers proposed a system in which each municipality or prefecture established a local school board.[4] That measure was to ensure governmental

responsiveness to the will of the people at the local level. Toward this end, the Board of Education Law of 1948 mandated the use of school boards in Japan.[5]

However, in the long run, the Japanese did not accept the structure the Americans imposed upon them. Conservative Japanese argued that centralized control was more compatible with the Japanese personality.[6] They perceived equality of education to reside not in a locally controlled, pluralist system, but in national standards and a mandatory curriculum. The ensuing political battle inevitably eroded the spirit of the occupation authorities' reforms. In 1952, when Japan finally regained its national sovereignty, the Japanese Ministry of Education moved quickly to recentralize control over education.[7]

Thus, there are many superficial similarities between the educational systems of the United States and Japan. For example, in both countries, boards of education are responsible for the establishment and administration of public schools at the municipal and prefectural (or state) levels.[8] The method of choosing board members, though, differs in the two countries. In Japan, the chief executive of a municipality or prefecture appoints them. The local assembly approves or denies these appointments.[9] In the United States, selection practices vary considerably across states and localities. While in a majority of states the governor appoints board members, a number of other states provide for the election of board representatives.[10] Moreover, at the local level in the United States, election to board membership is more common than appointment.[11] The variety of selection mechanisms in the United States is characteristic of the pluralist approach to administration that American citizens favor. In contrast, Japan emphasizes standard practices across all prefectures and municipalities.

How the Japanese choose their school superintendents illustrates the greater centralization of public school administration in Japan. As is typical in the United States, Japanese boards of education appoint a superintendent who oversees the management of education for the board. However, in Japan, the Ministry of Education must approve prefectural candidates. The Prefectural Board of Education also must sanction municipal appointees.[12] Meanwhile, the federal and state governments of the United States have no role in the approval of lower-level superintendents.

Despite the centralization of education, a greater proportion of post-secondary vocational schools in Japan (92.4 percent) are private than in the United States (79.3 percent) (table 2.2). Similarly, Japanese publicly controlled vocational education institutions enroll fewer students than American ones. In the United States, 26.8 percent of vocational education students attend public schools. In Japan, the corresponding figure is 9.9 percent.

Table 2.2. Distribution of Noncorrespondence, Post-Secondary Vocational Education Institutions in Japan, by Control of School (percent)

	Technical College	Junior College	Special Training School	Miscellaneous School	Total
Public	93.6	16.6	13.2	3.1	7.6
Private	6.5	83.6	86.8	96.9	92.4
% of Public Institutions Subject to National Control	87.1	6.8	7.4	0.2	3.4

Source: Management and Coordination Agency, Statistics Bureau, *Japan Statistical Yearbook 1990*, pp. 655-663 (1980 data).

These facts suggest that Japan's greater degree of centralization derives from sources other than the public administration of vocational education schools. Another look at Table 2.2 shows that the United States and Japan also differ in the level of *national* administration of schools. The Ministry of Education exercises influence over these vocational schools by establishing national qualifying exams for admission to study in many fields.[13] In the United States, in contrast, the federal government does not have such authority except in the case of the military academies.

In Japan, Ministry of Labor oversight of vocational training parallels the Ministry of Education control of vocational education. The Ministry of Labor has responsibility for establishing a five-year basic vocational training plan to meet the demand for skilled labor. To do so, the Ministry of Labor operates 91 training centers through its subsidiary body, the Employment Promotion Corporation (EPC). In addition, it has supervisory powers over the 277 institutions administered by the prefectural and municipal governments.[14] The Ministry of Labor also approves private industry training programs that meet the standards set for public training centers. Most importantly, the Ministry of Labor develops and administers the national system of trade skill testing.

The federal government of the United States plays a much less direct role in the provision and control of vocational education. The departments of Education and Labor do not administer vocational institutions directly as do their counterparts

in Japan. Instead, they exercise influence through the oversight of programs established in conformity with national policy goals. The Job Training Partnership Act of 1982, for example, provides job training to economically disadvantaged individuals and other persons with "serious barriers to employment."[15] Though the federal government provides funds, state and local authorities manage the programs in conjunction with private sector employers. The JTPA does not guarantee uniformity of training. Rather, its objective is to fulfill specific policy goals through local implementation and private-sector participation. The resulting range of program variety and quality is typical of the American approach to education. Accountability to local concerns remains more important to most Americans than national standardization of educational outcomes.

The U.S. Department of Education's oversight of private-sector vocational education is mostly indirect. The department recognizes national and regional accrediting agencies that, in turn, approve private trade and vocational schools. The department furthermore requires state approval of those institutions. However, only federal student loan eligibility is contingent upon this process of accreditation and certification. The Department of Education's regulations provide no direct control over course curricula. Likewise, no federal skills tests enforce standardization across state and local boundaries. The lack of centralized administration in the United States thus impedes the development of uniform national vocational education and training standards.

In summary, despite superficial similarities, the controls on vocational education in Japan and the United States basically are quite different. While both countries share some similar administrative structures, they differ in how they focus power within those structures. The Japanese have adopted a much more centralized educational system than the Americans. This high degree of centralization promotes uniformity in Japanese educational outcomes. The Japanese example illustrates how a national government can assume a constructive leadership role in providing quality vocational education in response to heightened international competitiveness. By comparison, the United States example shows that weak central control of vocational education is likely to lead to nonuniformity in educational programs and outcomes.

Japanese and U. S. Vocational Schools

Several factors characterize Japan's Ministry of Education schools. First, Ministry of Education officials regard both vocational education and general academic courses as necessary for the student's full development. Second, all schools sponsored by the Ministry of Education have similar curricula. Third, the programs must last at least one year: one to three years in special training schools; three years in vocational courses in upper secondary schools; and five years in technical

colleges. Fourth, most of the students in Ministry of Education programs come directly from lower or upper secondary schools.[16]

Compared to the educational system in the United States, the Japanese system is more strictly meritocratic. Teachers in lower secondary schools evaluate students' pre-test scores and advise them which upper secondary school most likely would accept them. The students who score in the highest percentile usually, but not always, go on to general academic high schools. Teachers encourage students who score in the lower percentiles to apply to one of the various kinds of vocational schools. Therefore, students attending vocational schools usually come from the lower ability range. However, the Japanese believe in providing a high-quality education for students at all levels. Not only do the most talented people become well trained, but students of mid- and low-level academic ability also attain a high level of training. The importance the Japanese place on vocational education contrasts sharply with its relative unimportance in the United States (see figure 2.1). For example, of the $30 billion American firms annually spend on training workers, only one-third goes to vocational education.[17] Instead, these firms spend most of their money on training programs for white collar professionals and managers.[18]

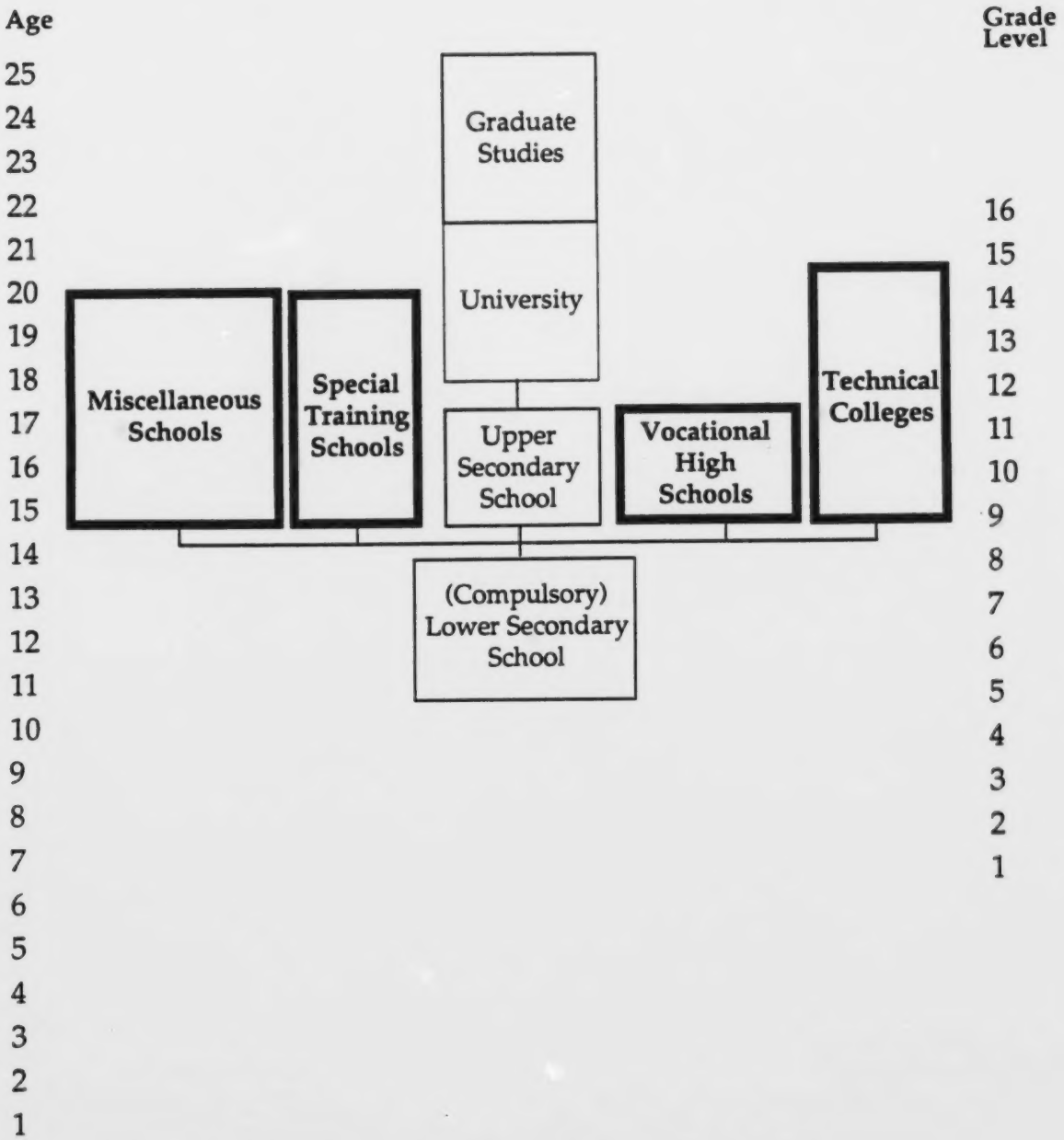
Japanese Vocational High Schools

The vocational programs offered in Japanese high schools are different from comparable programs offered by similar schools in the United States. First, Japanese programs provide a broader curriculum, including the study of both general and vocational subjects. Second, the required courses cover a wider range of vocational subjects. Third, Japanese vocational schools stress a more theoretical approach as opposed to a practical one.[19] The theoretical approach prepares the student to work in a number of related vocations instead of just one particular practical job.

All Japanese students have the option of entering either a general academic curriculum high school or a vocational curriculum high school. As the name implies, academic high schools offer nonvocational courses. In 1984, approximately 72 percent of all students enrolling in upper secondary school chose an academic high school. The remaining 27 percent, or about 1,400,000, selected a vocational high school.[20]

Students of secondary vocational schools may attend on a full- or part-time basis, or even complete school by correspondence. Students taking part-time or correspondence courses graduate in four years. However, the majority of students, about 95 percent in 1984, undertake full-time course work and graduate in three years.[21] Vocational and academic schools require a minimum of 80 credits (one credit consists of 35 unit hours of instruction during one school year) for graduation (tables 2.3 and 2.4).[22]

Figure 2.1. Ministry of Education Vocational Schools



Source: *Vocational Education and Training in the Developed World* (London: Routledge, 1989), p. 8

Table 2.3. Vocational High School Curriculum in Japan

General Subjects

Subject Area	Subject	Year 1	Year 2	Year 3	Total
Japanese Language	Japanese language I	4			4
	Japanese language II		2	3	5
Social Studies	Contemporary Society	2	2		4
	World History			3	3
	Geography			2	2
Mathematics	Mathematics I	4			4
	Basic Analysis		3		3
	Differentiation and integration			2	2
Science	Science I	4			4
	Physics		2		2
	Chemistry		2		2
P.E.	Physical Education	2	2	3	7
	Health	1	1		2
Art	Music I/Art I	2			2
English	English I	3			3
	English II		3		3
General Subjects Total		22	17	13	52

Source: P. Dore and M. Sako, *How the Japanese Learn to Work* (New York: Routledge, 1989), p. 38.

Note: One credit = 35 (50-minute) hours

In 1985, vocational high schools constituted 16 percent of all 5,453 high schools in Japan.[23] Vocational high schools offer students training in six major fields: technical (or industrial), commercial, agricultural, fisheries, home economics, and nursing. However, 60 percent of all courses required in these schools are academic in nature, while only 40 percent are vocational.[24] The standard academic classes taught are Japanese, social studies, mathematics, science, a foreign language (usually English), art, and physical education. In 1983, 97.6 percent of all students in upper secondary schools graduated. In vocational high schools alone, this percentage was just slightly lower.[25]

Specifically business-related classes include accounting, administration, and data processing. Among the industry-related courses a much wider range is available. Common specializations are machinery, electricity, electronics, architecture, and civil engineering. Other classes cover automobile repair, metalwork, textiles, interior furnishings, design, and printing. Moreover, vocational courses in Japan often require students to have a broad base of knowledge in a particular field. For example, a single business course includes typing, double-entry bookkeeping, commercial law, marketing, and basic electronic data processing.[26]

Table 2.4. Vocational High School Curriculum in Japan: Vocational Subjects

	Engineering Course				Electrical course			
Subject	Year 1	Year 2	Year 3	Total	Year 1	Year 2	Year 3	Total
Fundamentals of industry	4			4	3			3
Practice		4	4	8		4	6	10
Drawing	3	3	4	10		2	2	4
Industrial mathematics	2			2	2			2
Machine engineering work		2	2	4				
Machine design	1	2	3	6				
Prime movers		2	2	4				
Basic electricity		2		2	5	3		8
Electrical technology I						3	4	7
Electrical technology II						3	3	6
Totals				40				40

Source: P. Dore and M. Sako. *How the Japanese Learn to Work* (New York: Routledge, 1989), p. 38.

Note: One credit = 35 (50-minute) hours

Graduates of vocational high schools in Japan usually have few problems obtaining a suitable job. If they go to work for a large corporation, the new employees receive further training in-house. However, smaller companies rely more on the vocational education and training the employees received in high school. Vocational high school graduates also may choose to continue their education at the post-secondary level. Because they have a general academic background, they even may enter higher education.

U.S. Vocational High Schools

Public high schools provide vocational programs for the greatest number of students in the United States. In 1989, there were a total of 930,000 students enrolled in vocational education programs in American high schools.[27] Of the 15,729 high schools in the United States, most offer a small percentage of vocational courses in their curricula. Besides general high schools, there are 225 high schools in the United States specializing in vocational coursework only. Compared to general high schools, these vocational high schools are small. On average, they enroll between 400 and 500 students. Of those students, 85 percent typically are of high school age, and 15 percent are adults.

American vocational high schools offer four-year programs. The programs usually are either general vocational programs or occupation-specific programs.[28] The former are available to students in grades nine and ten. They include prevocational courses exposing students to broad occupational areas such as agriculture and business. Students in the eleventh and twelfth grades then may enroll in the occupation-specific programs. These programs train students for specific areas of employment such as computer programming, automobile repair, and electronics.

The latter, or occupation-specific, programs of American vocational high schools contrast sharply with the more theoretically based programs found in Japan. That contrast stems from the American schools almost exclusive emphasis on practical training. The eight major vocational fields offered are agriculture, electrical engineering, office occupations, marketing, home economics, mechanical occupations, technical graphics, and construction.[29]

Technical Colleges

The Japanese Ministry of Education established technical colleges in 1962 as an alternate system of education in science and technology. More specifically, the Ministry of Education created these schools to meet the rising labor demands of Japanese industry. Technical colleges accept students, at 15 years of age, directly from lower secondary schools. Graduation from a technical college requires five years of continuous education and training.[30] These colleges claim the programs they offer provide their students with about the same level of acquired knowledge and practical skills that university graduates receive. In 1984, 46,000 men and 1,500 women attended Japanese technical colleges.

Sixty-two such colleges now operate in Japan. Of that total number, 58 are public and 4 are private; 54 provide engineering courses; 5 administer mercantile marine courses; and 3 offer courses in radio communications.[31] Most technical colleges also have departments of chemical and civil engineering, and a majority of

them have departments of mechanical and electrical engineering. [32] In order to attend a technical college, students must commit to a rather narrow field of specialization at an early age.[33] Graduates of technical colleges may not have the same opportunity as university graduates to rise to senior management positions within a company. However, like Japanese vocational high schools, the technical colleges require their students to take academic courses. For example, students must study Japanese, foreign languages (English and German are most common), history, law, economics, music, and art. Students also must enroll in basic math, physics, and chemistry courses. Currently, the Ministry of Education has no plans to increase the number of technical colleges.

Miscellaneous and Special Training Schools

The large group of miscellaneous trade schools in Japan are, for the most part, private. They number about 4,300 and enroll some 530,000 students annually.[34] These schools provide a wide range of opportunities for skill acquisition. Among the courses offered are use of the abacus, automobile driving, bookkeeping, dressmaking, cooking, and foreign languages. Programs vary widely, but usually last a year or more. The most popular classes taught are preparation courses for college and university entrance examinations. About one-third of all students in these schools enroll in those courses. However, due to their relatively small size and private ownership, the schools also can respond quickly to changing needs in vocational education.

Individuals or corporations own or run about 90 percent of all special training schools. Most students enter at age 18, after graduating from upper secondary school. There are 3,089 special training schools. Of their 587,000 students, 56 percent are male and 44 percent are female.[35] Special training schools must meet four requirements set by the Ministry of Education. First, their courses must be at least one year in duration. Second, their students must spend a minimum of 800 hours per year in the classroom. Third, 40 or more students must enroll in each course. Fourth, the Ministry of Education must approve the number and qualifications of the teaching staff.[36] Special training schools offer eight major fields of vocational study: technology, agriculture, paramedical subjects, business, health, education, welfare, home economics, and cultural education.[37]

Special training schools have become very important to the vocational training of Japanese youth. Similar to miscellaneous trade schools, special training schools can respond with little delay to labor market demands. At the same time, special training schools seem to offer better job prospects than a general course at university or junior college. Students entering special training schools also avoid the "examination hell" associated with admission to a university or junior college. Special training schools do charge high fees, but with the general increase in Japanese income levels, most parents now can afford them.

U. S. Community Colleges and Proprietary Schools

Community colleges in the United States resemble the miscellaneous trade schools in Japan. Both types of schools offer vocational and general academic programs. Students usually enter these schools at age 18 upon graduation from high school. However, Japanese miscellaneous trade schools are privately owned and American community colleges are not.

There are approximately 1,200 community colleges in the U.S.[38] In 1989, 630,000 students enrolled in them. Community colleges furnish one-year vocational programs and two-year general academic programs. Still, the most popular courses are "transfer" programs. Community college students use such transfer programs to acquire credits enabling them to enter four-year academic institutions. Among the programs community colleges offer are general academic courses, business, computer programming, auto engineering, and home economics.

American proprietary vocational schools usually provide courses in specific occupational areas and do not offer courses in general education. In 1989, there were 1.5 million students enrolled in more than 6,800 schools across the U.S.[39] Proprietary schools, like special training schools are privately owned and offer occupation-specific programs. The programs offered include business, auto engineering, secretarial, and cosmetology. Proprietary schools provide programs that are one year or longer in duration. Like the special training schools in Japan, proprietary schools can respond quickly to labor market changes by providing training for the vocations in highest demand.

Manpower Training Programs

Ministry of Labor (Japan)

In 1985, Japanese prefectures and municipalities, under the Ministry of Labor's direction, supervised 91 facilities providing vocational training. Of this number, 56 were Vocational Training Centers (VTC), and 35 were Skill Development Centers (SDC).[40] In addition, 12 vocational training centers specialize in training the physically handicapped. Combined, VTCs and SDCs graduate over 150,000 trainees annually.

The Ministry of Labor has established several guidelines to which VTCs and SDCs must adhere. First, VTCs and SDCs are to provide students with the abilities necessary for a particular occupation. Second, each school must offer courses related to regional employment needs. Third, programs should be less than one year long. Fourth, programs are to accept school drop-outs, currently employed adults in need of further training, and people changing occupations.[41] Originally, the Ministry of Labor designated the VTCs to educate and train students who already had left school. SDCs, on the other hand, concentrated on programs to retrain adults and

update their skills. Over time, the distinction between the two has blurred, with the VTCs now focusing on training and retraining adults too.

Municipal and prefectural governments establish most of the VTCs. Consequently, the schools are sensitive to local demand for workers with particular vocational training. VTCs do provide training for both students of lower and upper secondary schools, as well as adults needing retraining.[42] However, the majority of students are graduates of upper secondary schools. Due to the smaller number of school-age students enrolling in VTCs, these schools currently place more emphasis on adult updating skills and retraining adults. For example, they retrain women who wish to reenter the workplace. Such women tend to choose courses in commerce, fashion, and catering.[43]

Federally Funded Programs (U.S.)

In the United States, the Job Training and Partnership Act (JTPA) of 1982 and the Carl D. Perkins Vocational Act of 1984 are federally funded manpower training programs. The JTPA provides funds to state governments to establish vocational training centers. The JTPA stipulates that local governments receiving funds must establish Service Delivery Areas (SDA). SDAs are the regions the JTPA has targeted for federal aid. In addition, the local governments must assist in creating Private Industry Councils (PICs). The PICs then plan and administer the training programs located within the SDAs. Those programs train unskilled workers and other disadvantaged young people and adults.[44] Most of them last one year or less.

The Carl Perkins Act attempts to establish a better relationship between the labor needs of private industry and the vocational education provided by institutions in a particular region. To do so, it encourages the development of partnerships between industry and education in designing pertinent programs and corresponding curricula.[45] Furthermore, the Perkins Act attempts to serve students outside traditional vocational education programs. In fact, the Perkins Act allocates more than half its funds to meet the needs of "special populations" including handicapped individuals, students with limited English proficiency, adults who need to retrain or upgrade their skills, and single parents.[46]

Certification of Vocational Education

Accreditation of Schools in Japan

In Japan, national agencies and prefectural governments certify and accredit schools in both the public and the private sector. Public schools *must* receive accreditation, whereas private ones need not. The Ministry of Education (MOE) certifies most schools, but the Ministry of Labour (MOL) also approves some institutions.

The MOE requires upper-secondary schools to devote one-third of their curricula to general course work and two-thirds to vocational or technical work.[47] In actual practice, though, the division is about half and half.[48] The reason for this practical division is the 1951 Industrial Promotion Law, which still sets the detailed standards for course work. According to that law, one-half of the time spent on vocational subjects *must* be actual practice and the other half *should* be class work. It also specifies the type and quality of training equipment,[49] and provides funding authorization. Under the law, funding comes one-third from the MOE and two-thirds from the respective prefecture and/or owner of the school.[50]

The MOE grants the title of "university" or "college" to institutions. That title conveys tax advantages to private universities and colleges meeting specific standards. Those standards include 124 units in various subject areas including course work in foreign languages, physical education, and so forth.[51] A broad range of core courses take up the first two years of a program of study, after which the students concentrate on work in their chosen major.[52] However, the MOE's effective oversight of private schools occurs only at the time of initial appointment and later during routine notification of requirements.[53]

Miscellaneous trade and special schools are predominantly proprietary institutions. They earn MOE approval by meeting curriculum guidelines. Although these guidelines allow wide variation, the resulting standards generally are sound.[54] Besides the MOE, miscellaneous trade schools must receive approval from the prefectures too.

In a 1975 amendment to the School Education Law the Diet (Japanese Parliament) allowed reclassification of some miscellaneous trade schools as "professional schools," or special schools.[55] The amendment provides for MOE approval and privileges if a school in the miscellaneous category meets certain criteria. Schools must have 40 or more students and offer at least one year of course work with 800 or more hours of teaching.[56] Finally, the MOE also certifies certain correspondence courses and provides guidance and encouragement for the students taking them.[57]

The 1969 Vocational Training Law (VTL) included amendments that allow the MOL or prefectural governments to sanction training sponsored by industry or business.[58] By the early 1980s, there were about 1,300 such programs. The Vocational Training Law permits prefectural governors to authorize vocational training conducted by employers, their associations, and trade unions provided they meet certain standards.[59] The law authorizes the national government and prefectures to provide various incentives and assistance to both employees and employers in approved programs.[60] These incentives and assistance include traineeship loans, training allowances for the unemployed, financial assistance for companies with

fewer than 300 employees, incentive grants for paid educational leave, and so forth.[61] Participating employers and associations also can establish vocational training schools, junior vocational colleges, and skill-development centers.

The VTL furthermore authorizes programs emphasizing retraining, the updating of skills, and human resource development in addition to basic vocational training. In keeping with the law, the MOL sets out course standards and guidelines covering curricula, duration of training, and necessary facilities and equipment.[62] Schools or firms meeting the criteria qualify for public subsidies and other assistance.

Accreditation of Schools in the United States

In the United States, vocational education is available from both public and private schools. High schools offer vocational training at the secondary level. Post-secondary vocational education is the province of community and technical colleges, universities, proprietary schools, correspondence courses, employers, trade unions, and the military.

The main government agency certifying schools and their concomitant eligibility for federally insured loans is the Department of Education (DOE). The DOE approves a proprietary school's application if it has state certification, accreditation by an organization recognized by the secretary of education, and is financially sound.[63] DOE approval is necessary in order for enrolled students to receive federal funding. Almost all proprietary schools depend on such funding from federally guaranteed loans to individual students for payment of their tuition charges.

There are two types of accreditation: institutional and program-specific. Regional and/or national agencies certify institutions based on the quality of their programs, instructors, and infrastructure. In addition, professional associations certify programs for training in specific occupations. Examples of such associations are the National League of Nursing, the National Council for Accreditation of Teacher Education, and the Accreditation Board for Engineering Technology.[64] Likewise, the Federal Aviation Administration's certification of avionics training is an example of a program requiring federal or state accreditation. However, many national accrediting organizations often consist chiefly of proprietary school operators. These organizations typically exercise no control over the curriculum or standards of the programs they accredit.

In the state of Texas, the regulatory body for proprietary schools is the Proprietary Schools and Veterans Education Division of the Texas Education Agency (TEA). Most schools receive state licenses by filing an application, showing accreditation by a national body, and posting a $25,000 bond.[65] Last year, however,

over 200 schools operated without licenses.[66] Most of them indeed had submitted applications, but TEA had not taken action yet. For its part, the DOE can suspend schools from eligibility for its programs if they do not show a current state license, even if the application is pending.[67] Nevertheless, as long as a state application is pending, the DOE allows schools to participate. It is noteworthy that bonds posted in order to receive state licenses cover just a small fraction of the tuition that failed schools owe their students. In fact, for the 41 schools that closed between 1990 and 1991, tuition refund debts ranged from $2.5 million to $25 million.[68]

Certification of Students in Japan

Japanese certification practices emphasize the graduate's general ability to acquire and learn skills, rather than his or her mastery of specific technical skills themselves.[69] The "public interest" in Japan also requires graduates to be familiar with such topics as worker safety and energy efficiency. At the same time, that interest prohibits schools or professional associations from certifying their own graduates.

Although most schools award diplomas or certificates to their graduates, certification is a local government responsibility. Local governments award certificates in 129 trades with 306 different qualifications, based on Skill Grade Tests administered under the aegis of the MOL (table 2.5). Tests follow a standard format and include written and practical sections. A Second Grade certificate requires a year of experience, while a First Grade one requires an additional four years of practice.[70]

Both public and private schools encourage students to take the certification tests. In addition, a 1984 revision of the Vocational Training Law allows the MOL to recognize companies' internal skill tests.[71] Some business associations, for example, employers of welders, have skill tests of their own that are very similar to MOL tests. Thus, many businesses expect prospective employees to possess their certificate or license.

Japanese professional associations and prefectural governments may exempt a person with at least some college education from portions of their certification examinations.[72] For example a college or university graduate can take a First Grade Test with only one year of practical experience instead of four.[73]

Table 2.5. Qualifications Set by the Japanese National Government

Type of Qualification	Number of Branches	Number of Exams*
Qualifications legally required as a condition for exercising certain professional functions (pilot's license, atomic power technician, dental technician, hairdresser, etc.)	128	146
Qualifications legally required as condition for assuming certain self-descriptions (Candidate Accountant, Registered Engineer, Health Visitor, Dietician, Sewage Superintendent, Master Cleaner (of clothes), etc.)	29	31
Qualifications required for appointments to government posts (Primary School Teacher, Technical Superintendent of Waste Disposal Works, Home Counsellor for Working Youth, etc.)	23	23
Qualifications designed to certify and encourage high levels of occupational performance (mainly MOL Skill Grade Tests)	306	563

Source: R. Dore and M. Sako, *How the Japanese Learn to Work* (New York: Routledge, 1989), p. 121.

* In some branches there is more than one examination. For example, there are three for the Ministry of Communication's wireless telegraphy and five for the MOE's shorthand writing certificates.

Certification of Students in the United States

In the United States, vocational certification combines state licensing for employment with diverse public and private measures of a graduate's competency. In certain trades, state licensing is a prerequisite for employment. However, to take

the licensing exam, an individual first must graduate from a state-approved school.[74]

Compared with Japan, the United States has few national skills tests. One of those few American tests is for prospective automobile mechanics. The National Institute for Automotive Service Excellence and the Educational Testing Service devised that exam in 1972.[75]

Other organizations like the National Occupational Competency Testing Institute (NOCTI), a non-profit educational corporation, also have developed tests for a range of fields.[76] The NOCTI Student Occupational Competency Achievement Test (SOCAT) measures graduates' entry-level skills in agriculture, business, industry, health, and vocational home economics.[77] Both public and private schools use these tests.

Several states have introduced curricula requiring competency examinations at public vocational institutions. They include Oklahoma, Vermont, Minnesota, Colorado, and Pennsylvania[78] In addition, a few states demand that graduates pass both general education and vocational skills tests in order for their schools to receive greater public funding.[79]

Conclusion

In the United States, federal, state, and private bodies accredit schools in a highly decentralized fashion. In contrast, in Japan accreditation is a more highly centralized function, usually exercised by the MOE. Unlike the U.S. Department of Education, Japan's Ministry of Education also directly administers some schools (e.g., its technical colleges).

In the United States, certification of graduates results from their passing tests administered by both public and private organizations. There are few national standards. In Japan, certification involves passing tests devised by either the national government or a national employer's association. Relative to Japan, the United States has a patchwork certification system that at best provides only spotty coverage. As a result, an American certificate or diploma generally is a poor indicator of a graduate's actual ability level.

The Japanese place a high priority on developing their human resources. As a result, their government has developed a closely controlled vocational education and training system. That system provides many educational options to students and adults in Japan. Based on testing administered in lower secondary schools, the Ministry of Education attempts to measure students' ability. Then students, with the advice of teachers, select the most appropriate school for their abilities. The Japanese Ministry of Education stresses that not only the academic elite should obtain a high

level of education. Students in the mid- and low-level ranges of academic ability also receive a high-quality vocational education and training. This emphasis on all ranges of ability assures that every student attains a high level of skill development. In the United States, on the other hand, vocational education is subject to relatively little oversight by the government. As a result, institutions providing vocational education vary widely in the quality of their educational programs. Furthermore, those programs often have only tenuous links to local labor market needs.

Notes

[1]Leonard Cantor, *Vocational Education and Training in the Developed World* (London, New York: Routledge, 1989), p. 12.

[2]Anthony P. Carnevale et al., *Training Partnerships: Linking Employers and Providers* (Washington, D.C.: U.S. Dept. of Labor, 1990), p.1.

[3]Ibid.

[4]Laura S. Scott, "Vocational Preparation in the Japanese Education System: Lessons for America" (Professional report, Lyndon B. Johnson School of Public Affairs, The University of Texas at Austin, 1985), p. 13.

[5]Ibid., p. 14.

[6]Ibid., p. 17.

[7]Ibid., p. 16.

[8]Charles F. Bingman, *Japanese Government Leadership and Management* (New York: St. Martin's Press, 1989), p. 116.

[9]Hiroshi Kida, *Development and Present Situation of Educational Administration in Japan,* Occasional Paper, no. 11 (Bangkok, Thailand: UNESCO, 1982), p. 11.

[10]Ronald F. Campbell et al., *The Organization and Control of American Schools* (Columbus, Ohio: Merrill Publishing Company, 1980), p. 73.

[11]Ibid., pp. 193-195.

[12]Kida, *Educational Administration in Japan,* p. 12.

[13]Ibid., p. 72; and Ken Inoue, *The Education and Training of Industrial Manpower in Japan,* (Washington D.C.: The World Bank,1985), p. 17.

[14]Ibid., p. 21.

[15]Ralph C. Wenrich, J. William Wenrich, and Joel D. Galloway, *Administration of Vocational Education* (Homewood, Illinois: American Technical Publishers, 1988), p. 115.

[16]Ken Inoue, *The Education and Training of Industrial Manpower in Japan,* p. 20.

[17]Ira Magaziner et al., *America's Choice: High Skills or Low Wages!* (Rochester: National Center on Education and the Economy, 1990), p. 49.

[18]Ibid.

[19]Ibid., p. 15.

[20]Ibid.

[21]Ibid., p. 12.

[22]Inoue, *The Education and Training of Industrial Manpower in Japan*, p. 12.

[23]Ronald P. Dore and Mari Sako, *How the Japanese Learn to Work* (London, New York: Routledge, 1989), p. 33.

[24]Cantor, *Vocational Education and Training in the Developed World*, p. 14.

[25]Ibid., pp. 13-14.

[26]Ibid., p. 14.

[27]Ibid., p. 72.

[28]Ibid., p. 73.

[29]Ibid.

[30]Inoue, *The Education and Training of Industrial Manpower in Japan*, p. 14.

[31]Cantor, *Vocational Education and Training in the Developed World*, p. 16.

[32]Ibid.

[33]Ibid., p. 17.

[34]Ibid.

[35]Ibid., p. 18.

[36]Inoue, *The Education and Training of Industrial Manpower in Japan*, p. 17.

[37]Cantor, *Vocational Education and Training in the Developed World*, p. 18.

[38]Ibid., p. 80.

[39]Ibid., p. 82.

[40]Ibid., p. 21.

[41]Inoue, *The Education and Training of Industrial Manpower in Japan* , p. 20.

[42]Ibid., p. 22.

[43]Ibid.

[44]Cantor, *Vocational Education and Training in the Developed World*, p. 85.

[45]Ibid., p. 87.

[46]Ibid.

[47]Ronald P. Dore and Mari Sako, *How the Japanese Learn to Work* (New York: Routledge, 1989), p. 14.

[48]Ibid.

[49]Ibid., p. 43.

[50]Ibid.

[51]Cantor, *Vocational Education and Training in the Developed World: A Comparative Study*, p. 49.

[52]Ibid.

[53]Ibid.

[54]Cantor, *Vocational Education and Training in the Developed World*, p. 19.

[55]Hidetoshi Kato, *Education and Youth Employment in Japan* (Berkeley, California: Carnegie Council on Policy Studies in Higher Education, 1978), p. 37.

[56]Ibid., p. 38.

[57]Institute of Manpower Studies, *Competence and Competition* (London: National Economic Development Office, 1984), p. 56.

[58]Dore, *How the Japanese Learn to Work*, p. 19.

[59]Inoue, *The Education and Training of Industrial Manpower in Japan*, p. 32.

[60]Ibid.

[61]Ibid.

[62]Cantor, *Vocational Education and Training*, p. 19.

[63]United States Senate, Permanent Subcommittee on Investigations of the Committee on Governmental Affairs, *Abuses in Federal Student Aid Programs, Hearings*, 101st Cong., 2nd Sess., February 20 & 26, 1990, p. 125.

[64]Ibid.

[65]Joyce Peterson, "Regulators of Trade Schools are 'In Crisis,'" *Austin American Statesman* (October 28, 1990), p. H1.

[66]Ibid.

[67]Ibid.

[68]Joyce Peterson, "Two-Thirds of Trade Schools Unlicensed," *Austin American Statesman* (October 5, 1990), p. C1.

[69]*Competence and Competition*, p. 50.

[70]Dore, *How the Japanese Learn to Work*, p. 126.

[71]Ibid., p. 104.

[72]Ibid., p. 119.

[73]Ibid., p. 124.

[74]Weinrich, *Administration of Vocational Education*, p. 213.

[75]Ibid., p. 216.

[76]Ibid.

[77]Ibid.

[78]National Assessment of Vocational Education, *Final Report: Summary and Findings*, Vol. I (Washington, D.C.: U.S. Department of Education, 1989), p. 124.

[79]Ibid.

Chapter 3. Financing Education in Japan and the U. S.

The U.S. and Japanese educational systems differ in their funding sources, financial assistance to students, family expenditures on education, and overall financing of vocational schools. Furthermore, the national, state/prefectural, and local governments play different roles in financing education in the two countries. For example, financial assistance in the form of grants and loans to individual students is much more extensive in the United States. Meanwhile, family expenditure on education is greater in Japan. Because few Japanese students rely on borrowing, credit systems and loan defaults are not issues in Japan.

The Role of Government in Financing Education

National Government

In Japan, the national government pays one-fourth of total public expenditure on education, whereas the United States federal government pays less than 10 percent of American total education expenditures.[1] Moreover, the Japanese spend more of their national budget on education (8.5 percent) than the United States government does (4 percent).[2] Unlike the United States, the Japanese national government also subsidizes private education.

The governments of both countries attempt to provide everyone a basic education. The Japanese constitution stipulates that the state and local public bodies shall take measures to give financial assistance to those who have, with all their ability, difficulty in receiving education for economic reasons. The constitution further states no tuition fee shall be charged for compulsory education in schools established by the state and local public bodies. However, because the Japanese value education highly, some citizens have been and remain critical of the system. As Shogo Schikawa states, they believe that "the current system of finance serves as a significant barrier to educational opportunity for children from low-income families."[3]

In response to such criticism, and the low quality of private education, the Japanese government in 1970 approved public support for private schools. National government policy now permits subsidies up to half the operating costs of a private institution. Policymakers believe higher subsidies to private institutions would infringe on their autonomy. The Ministry of Education (MOE), though, never provides the full 50 percent subsidy due to the propensity of private universities to exceed "authorized student enrollment." Furthermore, according to critics, "such generosity from the national treasury is inconceivable."[4] Overall, Schikawa says, "Japan is still searching for a practical and equitable strategy for financing higher education."[5]

The Japanese national government completely funds 629 "national" educational institutions at all levels. In addition, subsidies from the national government to private schools and local governments pay for up to half the cost of (1) salaries and allowances of educational personnel at compulsory schools and schools for the handicapped; (2) teaching equipment for public compulsory schools; and (3) the cost of construction of public elementary and secondary schools.[6]

In 1989, the MOE spent ¥4,638 billion ($36 billion) on education including teacher salaries, building and maintenance, and administrative costs (table 3.1). Nevertheless, only a small percentage of the funds went to vocational education and private schools. With respect to vocational education, the national government spent ¥58 billion ($457 million) on technical colleges, ¥1 billion ($8 million) on training schools, and ¥200 million ($2 million) on miscellaneous schools. In contrast, at the same time it spent ¥244.4 billion ($2 billion) on private higher education, and ¥72.5 billion ($570 million) on private compulsory education.[7]

Table 3.1. National Expenditures on Education in Japan
(millions of U.S. dollars)

Compulsory and Special Education	$ 19,200
National Schools	$ 8,750
Subsidies	$ 3,156
Facilities	$ 2,000
Scholarships	$ 654
Textbooks	$ 340
Other	$ 1,900
TOTAL	**$ 36,000**

Source: Foreign Press Center, *Education in Japan*, Japan, March 1988, p. 27.

In the United States, the Department of Education typically pays for new "model" programs and for students in need of special education. Federal funds rarely, if ever, pay for construction or maintenance of schools. The federal government contributes only about 6 percent ($12 billion) of total spending ($186 billion) for elementary and secondary schools.[8] Likewise, just about 10 percent ($12.2 billion) of the higher education budget comes from the federal government. While enrollment in public school higher education (10 million) is more than three times greater than private school enrollment (3 million), public institutions receive only twice as much money from the national government. Altogether, both public and private higher education institutions receive about 6 percent of their budgets from the national government.[9] Thus, Washington's involvement in American education clearly is lower than Tokyo's in Japanese education.

State and Local Government

In Japan and the United States, state/prefectural and local governments cover about half of all education expenses. Japanese local governments allocated ¥5,492 billion ($43 billion) to education in 1989.[10] Of this amount, the annual expenditure by local governments for different types of vocational schools was ¥10 billion ($80 million) for technical colleges; ¥23 billion ($181 million) for training schools; and ¥7 billion ($55 million) for miscellaneous trade schools (table 3.2).[11] Compared with the national government, Japanese prefectural and local governments spent more on miscellaneous trade schools and less on technical colleges and training schools.

Table 3.2. Vocational Education Expenditures in Japan
(millions of U.S. dollars)

	National	Local
Technical colleges	$457	$ 80
Training schools	$ 8	$181
Miscellaneous schools	$ 2	$ 55

Source: Statistics Bureau, Management and Coordination Agency, *Japan Statistical Yearbook*, p. 442.

In the United States, state governments cover less than one-third of the costs of state universities and about half the costs of junior colleges and elementary and secondary schools. At the same time, local governments pay about 16 percent of junior colleges' costs and 41 percent of the costs of elementary and secondary education. On the other hand, they seldom contribute to four-year programs.

Revenue Sources

Japanese and American data for total revenue sources for all levels of education are not directly comparable. However, they do indicate that local governments are the main supporters of elementary, secondary, and vocational (below the technical college) education (table 3.3). State/prefectural and national governments bear most of the public burden in financing technical colleges and higher education.

Although the United States uses inelastic property taxes to pay for elementary and secondary education, Japan relies mainly on more elastic individual and corporate income taxes to finance all levels of education. About 70 percent of tax revenue in Japan comes from these two taxes (each providing one-third of the total tax receipts).[12]

The next largest source of tax revenue in Japan is the value-added tax. It is a consumption tax applying to almost all goods and services (excluding medical care

and education). The national government enacted the consumption tax in 1989 in order to reduce direct income taxes. Income taxes have been as unpopular in Japan as property taxes are in the United States. Their unpopularity stems from their steep rates and numerous brackets. Accordingly, in 1989 the government lowered the highest individual income tax rate from 70 percent to 50 percent, and reduced the number of tax brackets from 12 to 5.[13] That alleviated public criticism somewhat. So, today the revenue sources financing Japanese education not only are more elastic than American ones, but also less likely to meet taxpayer resistance.

Table 3.3. U.S. Education Revenue Sources, 1985

Source of revenue	Elementary and Secondary (millions)	%	Junior colleges and Vocational Schools[1] (millions)	%	Higher Education[2] (millions)	%
Federal Gov't.	$9,100	6.1	NA		$10,466	10.4
State Gov't.	$66,800	44.7	$5,659	46.0	$29,912	29.8
Local Gov't.	$60,800	40.7	$2,027	16.5	NA	
Other	$12,800	8.5	$1,989	16.2	$21,991	21.9
Tuition and Fees	NA		$2,618	21.3	$23,117	23.0
Plant funds	NA				$7,713	7.7
Increase in fund balance [3]	NA				$7,239	7.2
TOTAL	**$149,500**	**100.0**	**$12,293**	**100.0**	**$100,438**	**100.0**

Source: U.S. Bureau of the Census, *Statistical Abstract of the U.S.*, Washington, D.C., pp. 153, 129.

NA- Not available
1 Includes schools accredited by the National Association of Trade and Technical Schools.
2 Covers universities, colleges, professional schools, junior and teachers colleges, both publicly and privately controlled.
3 Includes endowment, annuity, and student loans.

Educational Expenditures and Tuition for Japanese Vocational Schools

About 75 percent of the colleges and vocational schools in Japan are private. Over 77 percent of Japanese students attend them. In the past, public colleges and universities spent a great deal more money per student than private institutions. This discrepancy in spending left the quality of private education inferior due to

lower teacher salaries, higher teacher/student ratios, and so forth.[14] However, in the last decade, private schools have increased their spending enough to improve the quality of education substantially. As a result, the majority of students in Japan now prefer private institutions. At present, the average expenditure per student in a private vocational high school is $4,900, which is not much different from the $5,100 per student spent in public vocational institutions. The student-teacher ratio (1:40) also is about the same in both vocational education sectors.

Tuition varies greatly across vocational schools. Because of economic difficulties beginning with the 1973 oil crisis, tuition has been increasing at a faster pace than the Consumer Price Index. In Japan there are 4,199 public vocational high schools with 4,042,000 students enrolled. Even though these schools are public, they charge $600 tuition annually. Still, tuition covers only 13 percent of the schools' total costs. Government at all levels pays for the remainder. Meanwhile, the 1,311 private vocational high schools have 1,603,000 students. Their annual tuition now is $2,000. Private school tuition covers two-thirds of their total costs. Prefectural government subsidizes the private schools for the remaining one-third.

For its part, the national government also controls 303 vocational training centers in Japan. They have a total of 346,000 students. These training centers charge no tuition and even offer special financial assistance to students. In contrast, the tuition for certain special, private vocational schools exceeds $6,000. Their tuition is high because government provides them no subsidies or grants at all. This level of tuition is comparable to that charged by private vocational schools in the United States.

Educational Expenditures and Tuition for American Vocational Schools

In the United States, private education is much less important than it is in Japan. Here, both private not-for-profit and private for-profit colleges and vocational schools educate just 24 percent of the country's 11,213,432 post-secondary students.[15] That is virtually the opposite of the Japanese situation.

Furthermore, in the United States, there is a major difference in spending per student between private and public institutions. An average year of private education costs $6,664 compared with an average $4,118 for public education. Focusing on tuition and fees alone, the difference is even sharper: $3,264 at the average private institution versus $1,010 at the average public one. These differences stand in marked contrast with Japan, where private and public institutions spend roughly the same amount per student.

The pattern of enrollment in American institutions with two-year and shorter programs also offers strong contrasts with the Japanese situation. Of the 5,062,116 students in such programs in the United States, 85 percent are in public

institutions. Private, for-profit schools educate another 12 percent of those students. The average difference in tuition and fees between public and private, for-profit institutions for two-year programs is dramatic: $251 versus $2,389, respectively. The average difference for programs shorter than two years is just as large: $151 compared to $2,380.

Informants for this study were not confident about citing figures for the extent to which tuition and fees cover public and private schools' costs in educating their students. According to the informants, data on the number of private, for-profit schools, their student head counts, and costs are not reliable. In contrast, data comparing the total cost of an education to the student supposedly are more reliable.

Thus, for public education students living with their parents, tuition and fees for the average two-year program constitute 17 percent of their educational costs. In the case of programs shorter than two years, the average tuition and fees make up about 9 percent of the total cost. The comparable figure for students at private, for-profit institutions is 65 percent, regardless of program length. As in Japan, the lower tuition and fees at public institutions no doubt results largely from government's greater support for them than for private institutions.

Family Spending on Education in Japan

While in elementary and secondary schools, Japanese students gain a significant part of their education from cram schools, called *juku*. The *juku* are private and expensive. *Juku* do not receive financial assistance from the government. Nevertheless, the *juku* industry is thriving. In 1987, the income from all *juku* was about ¥800 billion (about $5 billion).[16] Individual fees vary depending on the student's grade level and the number of courses taken. The average family spends $3,000, almost one month's salary, per child/per year on *juku*, Some families hire private tutors rather than send their children to *juku*. Private tutors, though, are even more expensive than the *juku*, so only a small proportion of families can afford them. Because poor families cannot pay for such additional educational help for their children, a certain inequity exists in the Japanese education system.

Tuition and living expenses for Japanese students in higher education approach 25 percent of the average family's income. Parents, on average, contribute 80 percent of those costs.[17] At private colleges, comparable costs constitute 30 percent of the average family's income, of which parents cover 76 percent.[18] Even at junior colleges, tuition is high, costing roughly 20 percent of the average family's income.[19] Consequently, "the family budget is overburdened by the costs of education, but parents are willing to put up with the situation to provide the university education that will assure their offspring's future."[20]

Family Spending on Education in the United States

While private tutoring certainly exists in the United States, this country lacks an equivalent to the Japanese *juku*. Accordingly, American families generally first encounter substantial educational expenditures when their children enroll in post-secondary education. In two-year programs, 72 percent of students at public schools receive no financial aid. At private, not-for-profit and at private, for-profit institutions, the comparable figures are 36 percent and 17 percent, respectively. In programs shorter than two-years, 48 percent of students at public schools receive no financial aid. At private, not-for-profit institutions, 34 percent of students do without financial assistance, as do 15 percent of students at private, for-profit institutions. More students at private institutions may require financial aid due to government's reluctance to subsidize these schools directly. However, it is noteworthy that despite the above-mentioned equality in cost coverage at both types of private institutions, the proportion of unaided students differs markedly. The proportion of students receiving no financial assistance at all is twice as high at private, not-for-profit institutions as it is at private, for-profit schools.

In 1987, an American family's average annual income was $32,144.[21] Thus, all education-related expenses made up 13 percent of family income for unaided students at public institutions. For unassisted students at private, not-for-profit and private, for-profit schools, these expenses were 21 percent and 11 percent of family income, respectively.

For those students receiving it, financial assistance averaged $2,887 at public schools, $5,633 at private, not-for-profit schools, and $4,025 at private, for-profit institutions. So, educational expenses at public institutions made up 4 percent, and at private, not-for-profit institutions 3 percent of the average student's net of assistance family income. In the case of aided students at private, for-profit schools, financial assistance actually exceeded educational expenses. That excess amount represented about 1 percent of mean family income.

Of course, students receive aid on the basis of financial need as well as merit. Moreover, a considerable portion of American financial assistance comes as loans, which students must repay. Nevertheless, compared to Japanese households, even the families of unassisted American students pay out a smaller proportion of their income for education.

Financial Assistance to Students

Unlike Japan's direct subsidy to private higher educational institutions, the United States government provides indirect subsidies in the form of grants and loans to students. The system of grants and loans in the United States is complex. It includes Pell Grants, Supplemental Educational Opportunity Grants, Perkins Loans,

Stafford Loans (formerly Guaranteed Student Loans) and Work-Study programs. In addition to Stafford Loans, there are Parent Loans for Undergraduate Students (PLUS), Federally Insured Student Loans (FISL), and Supplemental Loans for Students (SLS). In 1990, an estimated 10,058,000 students received a total of $19 billion dollars in aid from one of the above programs. Table 3.4 shows financial assistance in the United States in dollars and the number of recipients from 1980 to 1987.[22]

Japanese students receive little financial aid compared to their American counterparts. However, in 1987, 440,000 students at all levels in Japan received a total of $1.18 billion in scholarships from the Japan Scholarship Society. In addition, fewer Japanese students take loans because parents save for their children's educations. Because there are fewer loans, loan defaults are not the problem in Japan that they are in the United States. Whereas in the United States scholarships go only to high-school graduates, the Japanese government provides scholarships to approximately 2 percent of the students still in high school. These scholarships range from $80 to $180 per month for public and private high school students, respectively. In the United States, over 50 percent of the students in higher education received some type of direct federal financial assistance, compared to less than 7 percent in Japan.[23]

Recently, there has been considerable national concern about student loans in the United States. Poor management and a high default rate caused one national loan guarantee agency, the Higher Education Assistance Foundation (HEAF), to fail. In 1990, the HEAF guaranteed over $9 billion in student loans, but had defaults amounting to $2.4 billion. For proprietary vocational school students alone, the HEAF guaranteed approximately $3 billion dollars in loans, and students defaulted on close to $1 billion.[24] That means these students accounted for more than 40 percent of the loans in default.

In Texas, the largest guarantee agency, the Texas Guaranteed Student Loan Corporation (TGSLC), currently has over $2 billion in outstanding loans. Here, proprietary vocational school students also receive about one-third of the loans. However, in 1989, these students accounted for 52 percent of all the default loan claims paid by TGSLC.[25] That figure is markedly above the already high national average.

Accordingly, the regulation of student financial aid has changed in the last several years. To exclude schools with high default rates from receiving additional federally guaranteed student loans, Congress made schools with default rates higher than 30 percent ineligible to participate in the Supplemental Loan for Students (SLS). This action resulted from a GAO study that found "defaults by proprietary school borrowers increased from 12 percent of SLS loan defaults in 1987 to 86 percent in 1989."[26] That led Secretary of Education William Bennett to attempt to exclude

Table 3.4. Major Federal Student Financial Aid Programs in the U.S.

Program	1980	1987
Pell Grants		
No. of recipients (in 1000s)	2,858	3,000
Funds used (in millions)	$2,387	$3,746
Average grant	$835	$1,249
Supplemental Educational Opportunity Grants		
Number of recipients (in 1000s)	716.5	634.7
Funds used (in millions	$368	$419
Average grant	$513	$659
Perkins Loans		
Number of recipients (in 1000s)	813.4	673.5
Funds used (in millions)	$694	$805
Average loan	$853	$1,195
Loans in default (in millions)	$608.1	$749.8
Default rate (%)	11.9	7.3
College Work-Study		
Number of recipients (in 1000s)	819.1	685.5
Funds used (in millions)	$660	$635
Stafford Loans		
Number of loans (in 1000s)	2,904	4,381
Funds used (in millions)	$6,200	$11,385
Average loan	$2,135	$2,599
Loans in default (in millions)	$1,694	$8,457
Default rate (%)	9.7	9.2

Source: Study sample and U.S. Department of Commerce, Bureau of the Census, "Current Population Survey," Washington, D.C., March 1990. (Data tapes.) Summary analysis of tapes distributed as handout by Leslie Lawson, Research Associate, Bureau of Business Research, Graduate School of Business, The University of Texas at Austin.

schools with a 20 percent or higher default rate. Currently, the average default rate on all loans is 28.9 percent for such borrowers, compared to just over 10 percent for students at four-year colleges.

Conclusion

Both the Japanese government and Japanese families spend relatively more on education than their American counterparts. Because Japanese parents typically save more for their children's education, government provides little financial assistance to students. Instead, most of the Japanese government's support for higher education goes directly to the educational institutions themselves. In the United States, government assistance to higher education is available in a larger variety of forms. Here, students are the direct recipients of much of that assistance, a large portion of which comes in the form of guaranteed loans. If the education afforded students fails to equip them with the skills needed to earn sufficiently high incomes, however, they are unable to repay those loans. The result is a serious policy problem.

The comparative research on Japanese and American vocational education presented thus far highlights key aspects of this problem. The main findings of that research include:

1. Japanese students work harder and score higher on standardized achievement tests than American students do.
2. At the same time, Japanese students are under more pressure to succeed at school. That pressure has high social and psychological costs for them.
3. Educational options available to both Japanese and American students besides traditional four-year institutions and company training include vocational high schools, community and technical colleges, and proprietary training schools.
4. The Japanese government maintains a high level of investment in human resources. To ensure this investment results in a high level of skill development throughout the general population, the Japanese government closely supervises all forms of education.
5. By comparison, the United States government invests considerably less in human resources. Furthermore, its oversight of education is rudimentary at best. As a result, students often receive an education that does not reflect the needs of the local labor market. In addition, the quality of American graduates' skills varies widely.
6. Private educational institutions are relatively more important in Japan than in the United States. Nationwide qualifying exams help make certain graduates from both private and public institutions have mastered academic subjects as well as technical skills.

7. Thanks to uniform curricular requirements and testing standards, Japanese vocational certificates are good indicators of their holders' abilities. Without comparable requirements and standards, most American vocational certificates are meaningless.
8. Funding sources for education are more diverse in the United States than in Japan. While the Japanese government generally supports educational institutions directly, the American government provides much of its assistance indirectly through students. A large portion of the American government's educational assistance takes the form of guaranteed student loans.
9. Not only government, but also families spend more on education in Japan. Moreover, Japanese family spending tends to come from accumulated savings rather than government-guaranteed loans to students.
10. Accordingly, Japanese vocational school graduates begin their vocational lives well-educated, well-trained, and debt free. Their American counterparts, however, often are poorly educated and trained. Furthermore, they cannot find the high paying jobs they need in order to repay their student loans.

Notes

[1] U.S. Department of Education, *Japanese Education Today*, ed. Cynthia Hearn Dorfman (Washington, D.C., January, 1987), p. 7; U.S. Bureau of the Census, *Statistical Abstract of the U.S.: 1990*, 110th edition, (Washington, D.C., 1990), p. 137.

[2] U.S. Bureau of the Census, *Statistical Abstract*, p. 130; and Foreign Press Center, *Education in Japan*, March 1988, p. 26.

[3] Shogo Ichikawa, "Finance of Higher Education," in *Changes in the Japanese University: A Comparative Perspective*, eds. William K. Cummings, Ikuo Amano, and Kazuyuki Kitamura (New York: Praeger, 1979), p. 57.

[4] Ibid., p. 62.

[5] Ibid., p. 63.

[6] U.S. Department of Education, *Japanese Education Today*, p. 10.

[7] Statistics Bureau, Management and Coordination Agency, *Japan Statistical Yearbook*, p. 442.

[8] U.S. Bureau of the Census, *Statistical Abstract*, p. 137.

[9] Ibid., p. 129.

[10] Keizai Koho Center, Japan Institute for Social and Economic Affairs, *Japan 1990: An International Comparison* (Tokyo, 1990), p. 80.

[11] Statistics Bureau, *Japan Statistical Yearbook*, p. 668.

[12] Foreign Press Center, *Japan: A Pocket Guide* (Japan, 1990), p. 73.

[13] Ibid.

[14] Ichikawa, "Finance of Higher Education," p. 42.

[15] Data on enrollment, educational costs, and student financial aid in this and the following subsection come from the National Center for Education Statistics, "Undergraduate Financing of Postsecondary Education: A Report of the 1987 National Postsecondary Student Aid Study," (Washington, D.C.: U.S. Department of Education, June 1988), pp. 18, 24, and 25.

[16] U.S. Department of Education, *Japanese Education Today*, p. 13.

[17]Ibid., p. 54.

[18]Ibid.

[19]Ibid.

[20]Foreign Press Center, *Education in Japan*, p. 30.

[21]U.S. Bureau of the Census, *Statistical Abstract*, 1991, p. 446.

[22]Ibid., p. 159.

[23]U.S. Department of Education, *Japanese Education Today*, p. 54.

[24]Class presentation by David E. Jacob, "Guarantors and Lenders for Proprietary School Students," LBJ School of Public Affairs, The University of Texas at Austin, Austin, Texas, October 1990.

[25]Texas Legislature, Joint Interim Committee on Proprietary Schools, *Interim Report*, July 1990, p. 16.

[26]John B. Lee and Jamie P. Merisotis, "Proprietary Schools: Programs, Policies, and Prospects," November 1990, p. 97.

Chapter 4. Financing Vocational Education in Texas

Background

The Guaranteed Student Loan (GSL) program was designed in 1965 as a means of providing unsubsidized loans for college education to middle-income families neither too poor to qualify for need-based grants, nor wealthy enough to finance their children's tuition needs without assistance. [1] Today, federal funding for need-based scholarships is increasingly scarce. The GSL is now the principal source of support for low-income students attending not only two-year colleges and universities, but short-term vocational programs as well.[2] Although recently some researchers have focused on financial aid to college students and their families, they have given scant notice to the funding of vocational education.[3] This lack of attention to financial assistance for vocational education is particularly troubling because vocational students are responsible for a significant percentage of guaranteed loan defaults.

The cost of student loan defaults to the federal government has risen dramatically in the last few years: from $100 million per year in the 1970s to more than $1 billion per year by the mid-1980s.[4] According to Cronin, the largest source of this deficit derives from students in metropolitan areas attending community colleges and proprietary schools.[5] While vocational students receive about one-third of GSLs, their default rate is 40 percent, twice the rate of community college students and four times that of students in four-year institutions.[6]

Why are individuals in vocational programs so much more likely to default on their loans than other students, and what can be done to reverse this trend? According to Cronin, the high default rate by both vocational and community college students reflects the disproportionately high percentage of first-year students in all types of educational programs who default on their loans.[7] He recommends that Congress enforce a low dollar limit for loans to first-year students while raising loan limits for college and university students beyond their first year of study.[8]

Other researchers, however, suggest that the problem may lie at least in part with the schools themselves, particularly in the case of proprietary institutions.[9] Thus Breneman asks "whether it makes sense to finance high-risk students in institutions with questionable motivation."[10] In his view, the "shoddy behavior" of certain of these vocational schools demands a radical overhaul of the tripartite regulatory apparatus of private accreditation, state licensing, and federal eligibility and certification. [11]

Bosworth too perceives the problem in terms of the relationship between the student and the school. He sees the primary reasons for the high rate of default as twofold. First, trade school students often feel they receive little benefit from their

course of study. Second, some students may not understand that they are, in fact, assuming responsibility for a loan when they apply.[12] Consequently, it is important to offer incentives to such institutions in order to ensure that they encourage students to complete their programs by providing them with a valuable educational experience.[13]

The "value" of a particular program includes the degree to which it benefits the student once he or she enters the job market. However, a recent study concerning the effect of proprietary education on the labor market [14] was inconclusive in this regard. It found that both male and female vocational school graduates did command higher earnings than those that attended only high school. However, much of this difference, particularly in the case of men, was derived from factors other than their attendance in vocational programs, such as socioeconomic status, educational expectations, and orientation towards work.[15] It is also important to establish a system to ensure that students are fully informed regarding their responsibilities for repayment.

Research Methodology

The differing opinions in the literature on the causes of high default rates among vocational school students strongly suggest the need for research in the area. This study investigates the roles schools, students, and the guaranteed student loan system play in determining the default rate among vocational students. The following description of the methodology employed here includes an analysis of the difficulties that arise in undertaking studies of student loan recipients.

Sample Selection

The Texas Guaranteed Student Loan Corporation (TGSLC) provided a list of 300 student loan recipients drawn randomly from vocational school loan recipients in the 1988 calender year. TGSLC drew names as needed from the following four groups:

1. Texas State Technical Institute (TSTI) students who have repaid student loans,
2. TSTI students in default on student loans,
3. proprietary school students who have repaid student loans, and
4. proprietary school students in default on student loans.

Thus, students were divided equally between (1) those attending TSTI and proprietary schools, and (2) between those who have repaid and those who are in default on their student loans. Researchers eventually reached a sample of 100 vocational students, equally divided among the four groups (table 4.1).

Table 4.1. Distribution of Sample

	Loan Status	
	Repaid	In Default
School Type		
TSTI	25	25
Proprietary	25	25

Interviews

A team of nine researchers systematically contacted subjects on the sample lists. The researchers usually attempted to call between the hours of 9 a.m. and 9 p.m. Many potential interview subjects could not be reached. Some people in the sample had moved from the address on the list provided by TGSLC. When researchers could obtain forwarding phone numbers, they continued attempts to reach the ex-students. Often phone numbers belonged to references or accommodation addresses used by the students, rather than to the students themselves. Some phone numbers simply were incorrect. Occasionally, the subject never was found at home. Other obstacles included no answer after five attempts, change of number to unpublished listings, and refusal to participate (table 4.2). As the level of difficulty in reaching subjects became apparent, TGSLC supplied additional replacement lists across all categories. The researchers attempted to reach a total of 631 people. Of these, 100 gave complete interviews.

Table 4.2. Reasons for Not Completing Interviews

	Completed Interviews	Refused / Not Interested	No Answer/ Answer Machine/ Not there	Disconnected/ Moved/ Wrong #	Total
Proprietary Repayers	26	1	54	15	96
TSTI Repayers	25	4	31	5	65
Proprietary Defaulters	24	4	125	36	189
TSTI Defaulters	25	3	80	40	148
Unidentified Category		2	81	9	92
Totals	100	14	371	105	590

When loan recipients answered the phone (476 calls were made in which the phone was either disconnected or no one was home), researchers asked them to participate in a 15 minute telephone interview. The refusal rate, at 14 percent overall, was significantly higher for defaulters than repayers. If potential respondents agreed to participate, the interview either proceeded immediately or was scheduled for a later, more convenient time. The interview schedule included seven sections. The first section contained questions concerning the basic demographics of the loan recipient. The second section examined how the loan recipient had heard about the school they attended. The third section pertained to the loan recipient's first contact with the school. The fourth section contained questions used to ascertain how the recipient learned about student loans. The fifth section sought to ascertain the materials used in the program. It also asked for the respondent's impressions on how well the school had assessed the respondent's basic skills. Also included were attitude questions on the quality of the instructors' assistance in job placements and the importance of financial aid in the decision to enroll. Respondents answered all attitude questions on a scale from 1 to 7, with "7" marking the highest level of agreement and "1" the lowest level of agreement with a statement. The sixth section concerned completion of the program and school policies regarding refunds, termination fees, exit interviews, and applied skills tests. The sixth section also included a question asking the students whether they now possessed the requisite skills to find a job at the salaries they anticipated. The final section contained questions about obtaining a job after leaving vocational school.

Conducting telephone interviews had both advantages and disadvantages. Among the advantages were a relatively high response rate, speed, relatively low cost, applicability to heterogeneous or geographically dispersed populations, accuracy, and increased data quality. In contrast, the disadvantages included "broken off" interviews and possible respondent uneasiness about discussing some topics over the telephone. Although in this study there were only two broken off interviews, several respondents did not answer all of the questions. Respondents had the option of scheduling their interviews at more convenient times and places to ensure privacy.

In summary, one barrier to obtaining a sample of student loan recipients is the mobility of recipients. Recipients who failed to provide TGSLC with a forwarding address and phone number could not be included in the sample. There are undoubtedly a number of loan recipients who would prefer that TGSLC not have their current address and phone number. Such difficulties suggest that respondents who could not be reached are more likely to be highly mobile, in default, and perhaps unable to obtain or hold a job.

Site Visits

Researchers conducted "site visits," as potential students interested in enrolling in vocational schools across the state of Texas. The cities in which

researchers visited schools were Austin, Dallas, El Paso, Houston, and San Antonio. The schools selected for visits included at least one in each city known to have high overall default rates on student loans. The purpose of these trips was to experience firsthand:

1. the application process,
2. the working environment of different schools,
3. the level of pressure to enroll exerted by representatives, and
4. the amount and content of information on student loans provided by school representatives.

Data Analysis

All responses to interviews were coded numerically for an analysis based upon school type and repayment status. Analysis was concentrated on overall frequencies and cross-tabulations between school type, repayment status, and other variables. Researchers also made detailed notes of the explanatory comments offered by respondents. As in any empirical study based on self-reports through interviews, the data collected reflect the attitudes and perceptions of the respondents.

Demographics of the Study Population

When asked their marital status, 43.4 percent of the sample responded that they are single while 46.5 percent reported being married. Only 2.0 percent were separated and 8.0 percent were divorced. The 1990 Current Population Survey (CPS) statistics for the total population show 21.2 percent were single, 64.5 percent were married, 2.6 percent were separated, and 8.9 percent were divorced. The weighted labor force data were very similar to the data for the total population (table 4.3). A possible reason for the differences between proportions of married and single groups in our survey and the CPS may be the age differences between the three groups. A greater proportion of the older CPS sample may be married, as opposed to the study sample of primarily younger people.

Forty-three percent of the respondents were male and 57 percent were female. The CPS reports a 47.1 percent male and 52.9 percent female unweighted gender distribution for the total population of Texas. Proportions of ethnicity are similar to a typical Texas distribution: 51 percent of the respondents were Caucasian, 27 percent were Hispanic, 17 percent were African-American, 2 percent were Asian-Pacific Islanders, and 1 percent were native Americans. As table 4.4 shows, Caucasians appear to be underrepresented in the study sample compared to the weighted CPS results. In contrast, minorities are slightly overrepresented when compared to their proportions in the CPS.

Table 4.3. Comparison of Study Sample and Current Population Survey (CPS) by Marital Status

Status	Sample	CPS Weighted Labor Force	CPS Weighted Total Population	CPS Unweighted Labor Force	CPS Unweighted Total Population
	%	%	%	%	%
Single	43,4	21.65	21.2	22.53	21.9
Married	46.5	63.59	64.5	63.16	64.0
Separated	2.0	2.67	2.6	2.88	2.9
Divorced	8.1	10.11	8.9	9.70	8.6

Source: Study sample and U.S. Department of Commerce, Bureau of the Census, "Current Population Survey," Washington, D.C., March 1990. (Data tapes.) Summary analysis of tapes distributed as handout by Leslie Lawson, Research Associate, Bureau of Business Research, Graduate School of Business, The University of Texas at Austin.

Table 4.4. Comparison of Study Sample and Current Population Survey (CPS) by Race/Ethnicity

Race/ Ethnicity	Sample	CPS Weighted Labor Force	CPS Weighted Total Population	CPS Unweighted Labor Force	CPS Unweighted Total Population
	%	%	%	%	%
Caucasian	51	63.5	62.7	53.6	52.0
Black	17	12.6	12.5	9.06	8.9
Hispanic	27	21.8	22.6	35.5	37.1
Other	5	2.1	2.3	1.9	2.0

Source: Study sample and U.S. Department of Commerce, Bureau of the Census, "Current Population Survey," Washington, D.C., March 1990. (Data tapes.) Summary analysis of tapes distributed as handout by Leslie Lawson, Research Associate, Bureau of Business Research, Graduate School of Business, The University of Texas at Austin

Fifty-five percent of respondents reported having two adults 18 or older residing in the household. Eighteen percent of respondents were the only adults in the household. Another 16 percent of the sample have three adults living in the household. Some 6 percent of respondents have four adults in the household. Two respondents reported five adults in the household.

A significant minority (40 percent) of respondents reported having no children in their households, 25.8 percent had one child, another 16 percent had two children, and 14 percent had three children in the household. Only 4 percent had four children in the household and no respondents reported more than four children in the household. The distribution of the number of dependents reported is similar. Forty-two percent of the sample claimed no dependents. Two groups of 19.4 percent claimed one or two dependents each. Twelve percent of the respondents claimed three dependents and 1 percent of the sample claimed six dependents.

While 27 percent of the sample reported having twelve years of education, 12 percent had eleven years or fewer, with the lowest level reported at two years of education. Another 38 percent reported having 13 to 14 years of education. Five percent had 15 years of education and 7 percent had 16 years of education. Finally, 3 percent of respondents reported having 17 years of education, and 1 percent reported 20 years of education (table 4.5). Ninety-six percent of the respondents have a high school diploma or General Equivalency Diploma (GED). Four percent did not have either diploma.[16] Three respondents did not answer this question.

Seventy-three percent of the sample currently were employed. Twenty-one percent of employed respondents worked 40 hours in the previous week and almost 53 percent worked 35 to 45 hours. Some employed respondents reported a range of hours worked from 10 to just under 40 hours a week. Other respondents reported working more than 45 hours the previous week. This group, representing over 24 percent of the sample, ranged from 47 hours to 80 hours, with one report of a 110-hour work week for a trucking firm.

The 1990 CPS shows the weighted percent of the labor force employed in full-time work is 84.8 percent. The CPS defines full-time work as 35 or more hours a week. The corresponding figure for part-time employment is 15.3 percent. The CPS designates part-time work as 34 hours or fewer a week. The percentage of part-time workers in the study sample is 16 percent. Therefore, the study sample distribution of employed respondents is very similar to the employed population of Texas, as reported by the 1990 CPS.

Of the 27 percent of respondents who reported being unemployed, about two-thirds said they are seeking employment. Adding this group to the employed respondents, a total of 89 percent of the study sample is in the labor force. This figure compares favorably to the weighted CPS estimate of 76.9 percent of Texans in the labor force (table 4.6).

Table 4.5. Comparison of Study Sample and Current Population Survey (CPS) by Years of Education

Years of Education	Sample	CPS Weighted Labor Force	CPS Weighted Total Population	CPS Unweighted Labor Force	CPS Unweighted Total Population
	%	%	%	%	%
None	0	0.4	0.6	0.6	0.9
1-8	6	6.9	9.3	9.8	13.0
9-12	32	46.2	47.7	47.3	48.3
13-17	55	40.3	37.1	36.8	33.0
>17	4	6.2	5.3	5.6	4.8

Source: Study sample and U.S. Department of Commerce, Bureau of the Census, "Current Population Survey," Washington, D.C., March 1990. (Data tapes.) Summary analysis of tapes distributed as handout by Leslie Lawson, Research Associate, Bureau of Business Research, Graduate School of Business, The University of Texas at Austin.

Note: The presence of respondents in the category that appears to represent some high school or a high school diploma (9-12 years) may be deceptive. Similarly, the presence of respondents in what appears to represent some college or a college degree (13-17 years) may also be deceptive. In either case, be mindful that respondents in the study sample in all likelihood included the time spent in vocational education in their responses. This format is used only to allow comparison to the CPS data, which are presented in the format used in table 4.5.

Forty-five percent of the respondents reported incomes of $10,000 or less. Another 43 percent reported incomes between $10,001 and $20,000. Only 13 percent of the sample had personal incomes of $20,001 or above. Household incomes displayed a pattern different from personal incomes. Personal income of respondents appeared to be supplemented by second incomes in the household. Eighteen percent of the respondents had household incomes of $10,000 or less. This is a significantly smaller proportion compared to the same category in personal income. Thirty-nine percent of the respondents had household incomes between $10,001 and $20,000. Also, 40 percent of the sample had household incomes of $20,001 and above. This is a striking contrast to the 13 percent in the same income category for personal income. The $20,001 and above category can be further divided. Twenty-one percent of the sample had household incomes between $20,001 and $30,000 and 19 percent had household incomes above $30,000.

The CPS provides median income information for the Texas population. The median personal income for the 1990 total population is $11,500. For full-time workers, the median is $19,000 and for part-time workers, the median is $6,006. Unemployed persons have a median income of $3,600, and persons not in the labor force have a median income of $1,655. Forty-two percent of the respondents had personal incomes below $10,000. Thus, a large proportion of the personal incomes in the study sample falls below the median income for the total population, which is $11,500.

Table 4.6. Comparison of Study Sample and Current Population Survey (CPS) by Employment in Texas.

Employment Status	Sample	CPS Weighted Labor Force	CPS Weighted Total Population	CPS Unweighted Labor Force	CPS Unweighted Total Population
	%	%	%	%	%
In Labor Force *	89.0	100.0	76.9	100.0	75.4
Not in Labor Force	10.0	0.0	23.2	0.0	24.7
Employed	72.7	94.6	72.7	93.5	70.5
Unemployed	27.3	5.4	4.2	6.5	4.9

Source: Study sample and U.S. Department of Commerce, Bureau of the Census, "Current Population Survey," Washington, D.C., March 1990. (Data tapes.) Summary analysis of tapes distributed as handout by Leslie Lawson, Research Associate, Bureau of Business Research, Graduate School of Business, The University of Texas at Austin.

* Employed and unemployed but looking for work.

The median family income reported by the CPS for the total population is $27,800. For full-time workers, the median family income is $32,298, and for part-time workers, the median family income is $23,050. Unemployed persons have a median family income of $14,881, and persons not in the labor force have a median family income of $20,522. In the study sample, 81 percent of respondents had household incomes of $30,000 or less. The CPS median family income for the total population is $27,800. So, the majority of this 81 percent had incomes below the CPS median for family income.

Cross-tabulations were run between the demographic variables. Researchers sought relationships significant at the 0.05 level. A result significant at this level means some relationship exists between the variables, about which we can say we are 95 percent certain the result is not caused by chance. However, we cannot prove a causal relationship exists merely because the variables are associated.

Marital status had no effect on whether a loan recipient had attended TSTI or another proprietary school. However, a significantly higher number of females attended proprietary schools other than TSTI ($\chi^2 = 0.0142$). Twenty-eight women attended proprietary schools compared to 15 who attended TSTI. Males attended TSTI somewhat more than proprietary schools (34 versus 23, respectively). This result may be due to the more technical orientation of the TSTI curriculum, although some proprietary schools also have technical programs.

There was a significant difference in the racial make up of the sample who attended the TSTI and proprietary schools ($\chi^2 = 0.0095$). Races other than African-American attended both types of schools in relatively equal proportions. However, Caucasians and Hispanics attended TSTI somewhat more than proprietary schools. Conversely, only two African-Americans in the sample attended TSTI, while 15 attended proprietary schools. This situation may be the result of less recruitment among African-Americans by TSTI, or less awareness by African-Americans of the existence of TSTI.

Respondents with a high school diploma as opposed to a General Equivalency Diploma (GED) were significantly more likely to attend TSTI than proprietary schools ($\chi^2 = 0.0390$). As mentioned above, 93 percent of the sample had one of the two diplomas. Only four respondents did not have high school diplomas. Interestingly, these four all attended proprietary schools, while diploma holders attended TSTI and proprietary schools on a fairly even basis. This suggests TSTI may have a more stringent requirement for high school diplomas or GEDs, while some proprietary schools do not have such requirements.[7]

Similar proportions of respondents attending TSTI and proprietary schools were employed and unemployed at the time of the study. Slightly more respondents who had attended proprietary schools were employed. They worked 45 hours or less more often than their TSTI counterparts (32 to 21). TSTI respondents worked over 45 hours more often than proprietary respondents (12 to 5). One possible explanation for this is that proprietary programs usually train for regular work week jobs (secretarial, medical assistants, computer operators, etc.). TSTI programs may focus more on careers that more often require long work weeks. Whether a respondent attended TSTI or a proprietary school appears to have had no effect on current income.

The researchers also compared demographic variables with whether a respondent was in default or had repaid on a student loan. Gender, race, and number of adults, children, or dependents in the household were all insignificant in determining whether a subject was in default or had repaid a student loan. Years of education and high school diploma or GED also proved insignificant indicators. The same is true for employment status. Whether a respondent was employed at the time of the study appeared to have no bearing on whether they were in default or had repaid. Of 50 respondents who were repaying their loans, 40 were employed. Of 48 respondents who were in default on their loans, 32 were employed. This suggests that other reasons besides inability to pay may play a part in decisions to repay loans. However, respondents who were employed may not earn enough money to make loan payments after living costs are paid.

The number of hours worked in the previous week and whether respondents were seeking employment also appeared unrelated to a borrower's loan status. Personal income proved insignificant as a predictor of whether an individual would repay their loan. However, household income was a significant factor (χ^2= 0.0346). Respondents in the $10,000 or less category had repaid loans more often than defaulted (12 to 5). However, those in the $10,000 to $20,000 category were defaulted more often than repaid (24 to 11). In the $20,001 to $30,000 category, ten respondents had repaid and nine were in default. In the $30,000 and over category, eleven respondents had repaid and six were in default. Thus middle- and high-income respondents were more likely to be in default.

The study sample appears similar to both the general and working population of Texas. Thus, inferences, which should apply to the overall population of vocational students, can be made based on the study sample. A significantly higher number of females attended proprietary schools than TSTI. African-American students attended proprietary schools much more often than they attended TSTI. Races other than African American attended both types of schools in relatively equal proportions. Whether a respondent had a high school diploma or General Equivalency Diploma (GED) also proved significant with respect to which type of institution they attended. Slightly more respondents who attended proprietary schools were employed and were more likely to work 45 hours or fewer than TSTI graduates.

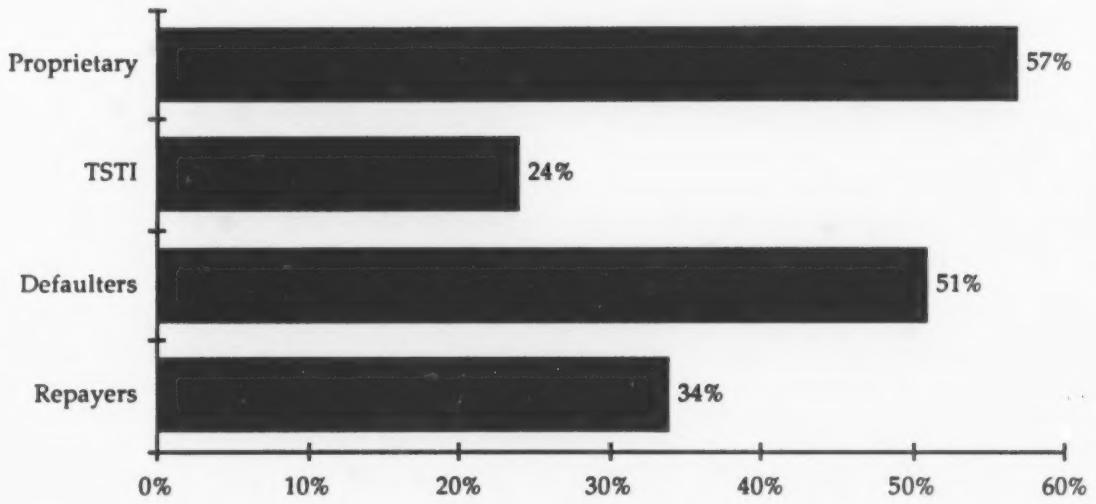
Household income proved a significant determinant of repayment. Middle and high-income respondents were more likely to be in default than low-income respondents. Those persons with high household incomes may have more bills to pay. They also may value material possessions more than repayment of their loans. Through mobility and/or ignoring default notices, they may believe they can get away with not paying their debts. Such anomalies indicate the need for reform of the loan repayment enforcement system.

The Pressure to Enroll

Proprietary vocational schools are reputed to put considerable pressure on prospective students to enroll in their programs. Students visiting the school for the first time face trained salespeople in the recruiter's chair. This section describes the differing degrees to which those who continue to repay their loans and those who have defaulted were pressured by recruiters. It also includes illustrations from anonymous site visits conducted by researchers to proprietary schools in the major business centers of Texas. During these visits researchers documented the pressure on students to enroll.

In an effort to get students to commit themselves, vocational schools often ask students to sign some form of contract during their first visit to the school. Results of the survey indicated a significant difference in the way those who eventually defaulted and those who continue to repay were treated in this respect. Fifty percent of those who defaulted said they were asked to sign a contract on the first visit to a school, whereas only 32 percent of those who are repaying responded similarly. Furthermore, 57 percent of proprietary students said they faced such pressure, compared to 24 percent of TSTI students (figure 4.1).

Figure 4.1. Respondents Who Were Asked to Sign a Contract on Their First Visit



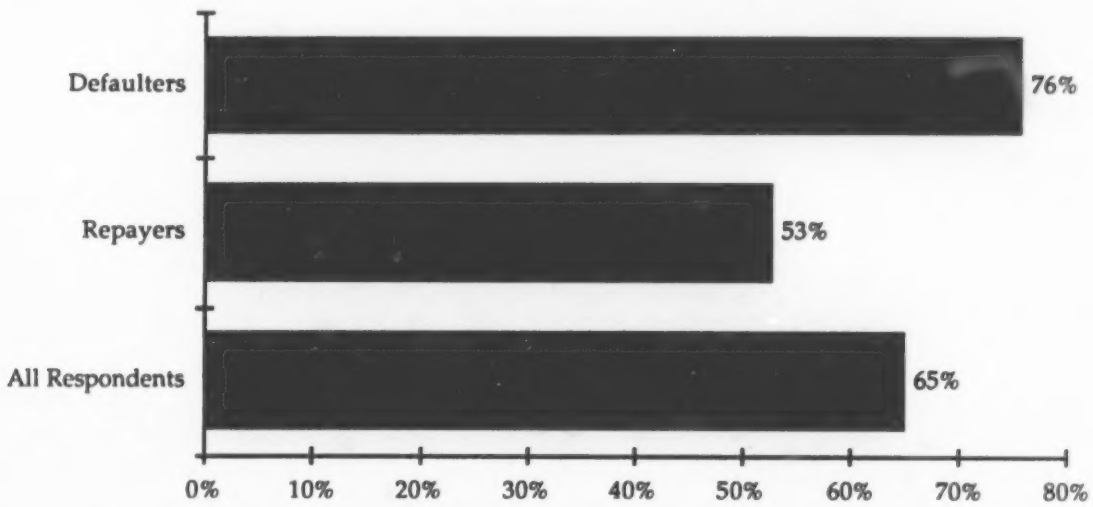
While some schools used no pressure tactics, others exerted great pressure on visiting researchers to sign the necessary documents on the first day. Schools contacted some visiting researchers at home repeatedly, reminding them of their next appointment. Recruiters asked one visitor to phone home to check his social security number in order to start the financial aid evaluation without delay. Schools also used campus tours and glossy literature to create an atmosphere conducive to

immediate application. On two occasions, researchers were asked to take assessment tests that were impossible to complete but, according to the recruiters, "did not matter anyway." When one student asked if she needed references or recommendations, one recruiter dismissed them "with a laugh."

Not all schools with high default rates uniformly pressured students. For instance, a San Antonio business school with a 56 percent default rate exercised very little pressure. The school actually encouraged the visitor to shop around before reaching a final decision.

Schools used the prospect of future employment to encourage students who were considering enrollment in their programs. Recruiters repeatedly stressed the merits of their placement services. Sixty-five percent of interviewees said the schools assured them that they would find a job after graduation. Those in default on student loans were more likely to have been given such assurances: 76 percent of them said they were assured employment compared to 53 percent of those who repaid loans (figure 4.2).

Figure 4.2. Respondents Who Were Assured of Getting a Job by a School Official



An El Paso business school stressed the success of their job placement service. It assured a visitor of "lifetime placement available nationwide," that is, as long as the school was in business. In other cases, placement services included assistance with part-time positions while the student was in school and an active post-graduate placement program that could arrange interviews, compose resumes, and post job notices. One recruiter said that if the student should ever find herself out of a job, the school would help place her in another job.

Recruiters at proprietary schools tend to take a more active role in providing information about financing for the programs than those at TSTI schools. Seventy-five percent of all respondents were told of the total cost of the program prior to enrolling (figure 4.3), and 75 percent were offered a loan (figure 4.4). Ninety percent of proprietary students were informed of the total cost by a school representative, and 97 percent of them were offered a loan. However, only 58 percent of TSTI students were informed of the total cost, and 77 percent were offered a loan.

Figure 4.3. Respondents Who Were Informed of the Total Cost by the School

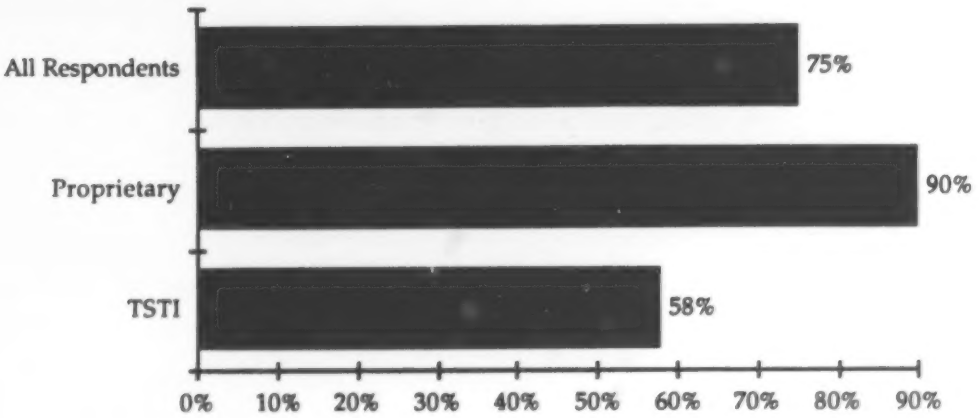
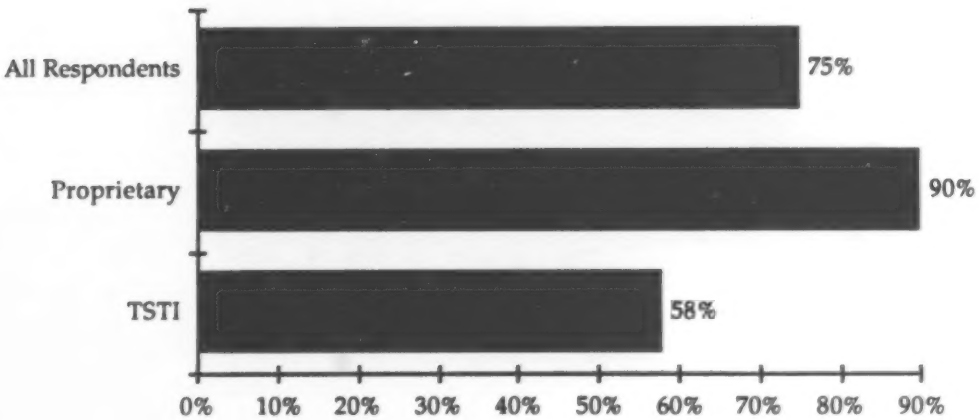


Figure 4.4. Respondents Who Were Offered a Loan



The recruiter at a proprietary beauty school was explicit about the cost of the program, but confident that the student would receive a sizeable grant. She wanted the student to go home and get his tax return at once to calculate financial aid eligibility. She said it was a good time to enroll because of the chances of receiving

additional financial aid. Another recruiter said that if the state liked the student, he or she could borrow unlimited amounts of money. "You can roll everything into loans," said yet another.

In a majority of the schools visited by researchers, site visitors encountered recruiters eager to provide detailed explanation about the program, costs, loans, and placement. However, at a few of the schools, researchers had to ask for such information from less enthusiastic admissions counselors.

Campus tours were an inevitable part of site visits to proprietary schools. Recruiters used this time to highlight the school's accomplishments, pointing to bulletin boards depicting graduates at work and current students operating "state-of-the-art" equipment and relating personal success stories like the one told by a recruiter during a tour of a secretarial school: "A woman had been working in the real estate sector when the bottom fell out, and the school gladly helped her find a new job at the salary to which she had become accustomed."

Some schools prefer to sort out uncommitted prospective students by setting up elaborate entrance requirements. A business school in San Antonio required a $100 registration fee, which could be paid in installments. The school also required students to open a savings account with a minimum deposit of $25 at a certain credit union. A person could not enroll until these requirements were met. The school also required that students use the same credit union to apply for their loans.

More often, recruiters were more interested in acquiring a financial commitment from the prospective student than assessing that person's long-term commitment to the program. When one student said he forgot to bring his checkbook to pay the $25 enrollment fee, one recruiter inquired if he could use an automatic teller and get it at once. When that failed, the recruiter demanded a promise from the student that he would mail the enrollment form and a check the very next day. The recruiter called the student at home twice after the visit to express concern at not receiving the fee. She urged the student to send the fee to save him a spot in the school even if he had not finalized his plans.

Uncommitted students visiting schools for the first time are faced with significant pressure to enroll. Site visits revealed that the most common methods of impressing prospective students were campus tours, emphasis on job placement services, and ease of obtaining financial aid. Some schools went to great lengths to pressure students, using such tactics as pressing them to sign contracts, calling them at home, or requiring them to make enrollment deposits. The results from the survey show that such pressure is greater at proprietary schools with higher default rates, but not without exception.

Knowledge of the Guaranteed Student Loan Program

In recent years, policymakers have theorized that there is a connection between a borrower's understanding of student loan programs and that borrower's propensity to repay a loan. They have portrayed defaulters as individuals who do not correctly assess their liabilities under the loan programs — who do not even fully comprehend that they have taken a loan that must be repaid. Borrowers either neglect their responsibilities through innocent ignorance or refuse to repay their loans because they feel they have been misled. According to these views, increasing borrowers' knowledge about loan programs should result in a decrease in defaults.

Acting on the insights of student loan industry analysts, the Department of Education issued a regulation on June 5, 1989, requiring schools to educate first-time borrowers about the responsibilities associated with student loans. It further mandated exit counselling as a means of following up on the initial instruction. Though many schools voluntarily conducted such counselling, policymakers intended the June 5th regulation to enforce a more comprehensive system of instruction. In particular, industry analysts thought the regulation would have the greatest effect on the sector with the highest default rates — proprietary schools.

Our survey targeted respondents who took student loans before the 1989 regulation. Overall, the findings demonstrate a high level of program knowledge among all respondents. They show, furthermore, that this level of awareness is fairly uniform across the relevant categories of respondents: repayers and defaulters, on the one hand and TSTI and proprietary school attenders, on the other. In short, the results do not support the suppositions of policymakers who proposed the June 5th regulations. At the same time, the findings cannot fully contradict their assumptions.

At first glance, frequency distributions support the conclusion that students at Texas State Technical Institute (TSTI) and at Texas proprietary schools have a general knowledge of the guaranteed student loan programs in which they participate. Ninety-four percent of the respondents in our survey indicated an understanding of their obligation to repay their student loans. Furthermore, 84 percent state that they knew when they would have to repay their loans, and 78 percent say that they were cognizant of their overall loan burden. With regard to awareness of student loan deferments, 78 percent of respondents indicated such a knowledge, while only 51 percent stated that they have had one (figure 4.5). Overall, the subjects of our survey demonstrate a high level of basic knowledge about the student loan program. In comparing TSTI to proprietary school respondents, there was no significant difference in the proportion of these groups who were aware of their obligation to repay their loan.

Likewise, approximately the same percentage of each group knew the time at which they should repay their loans. An interesting, though not significant,

difference between these groups is apparent in the percentages of those who knew their total loan burden upon leaving school. Whereas only 15 percent of TSTI respondents claim to have been unaware of their total loan amount, 29 percent of proprietary students state they did not know the level of their loan burden (figure 4.6). As there were no discrepancies between the two groups in their knowledge of deferments, one can conclude that there was no significant difference between them in their overall familiarity with the loan program.

Figure 4.5. Borrower's Knowledge of Loan Program (all respondents)

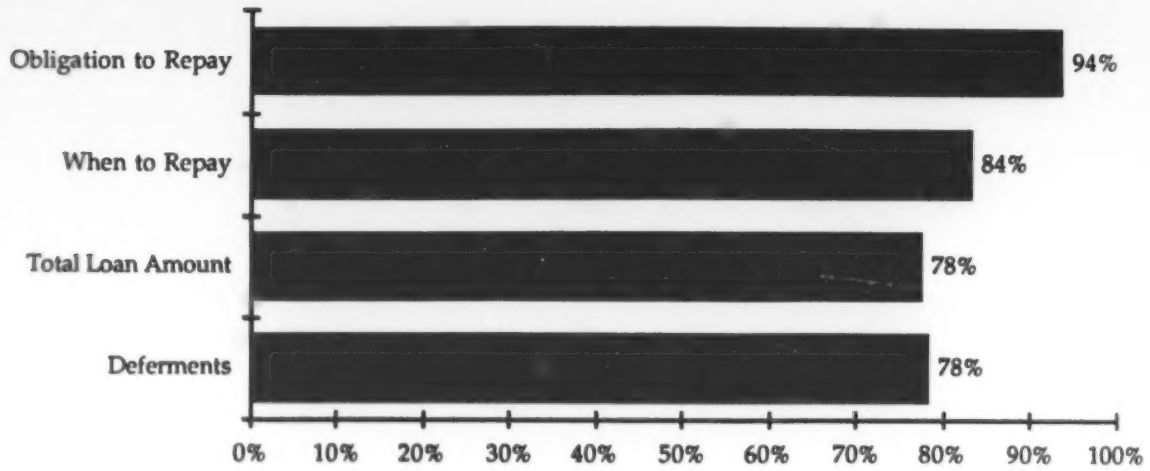
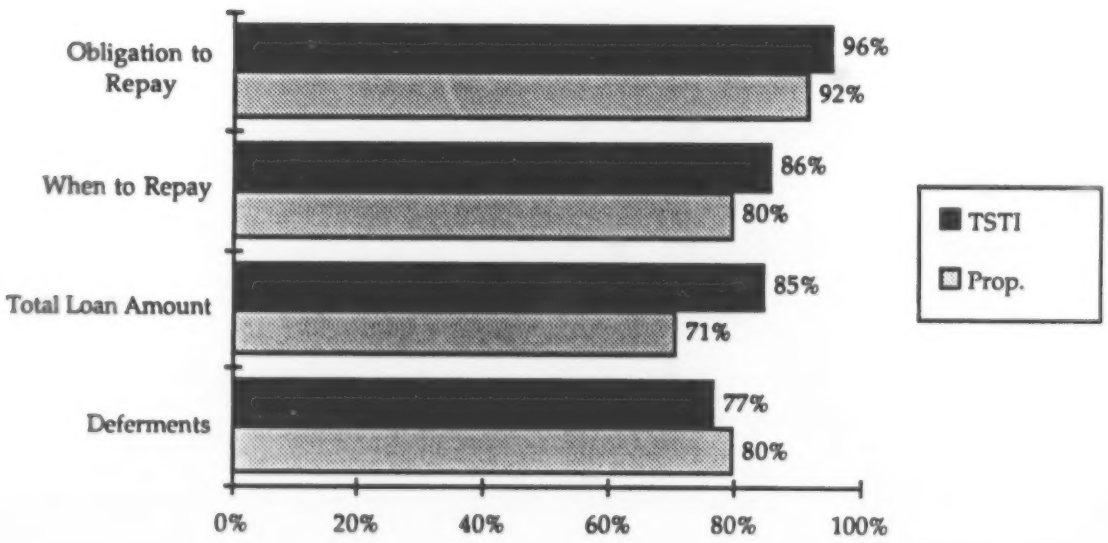
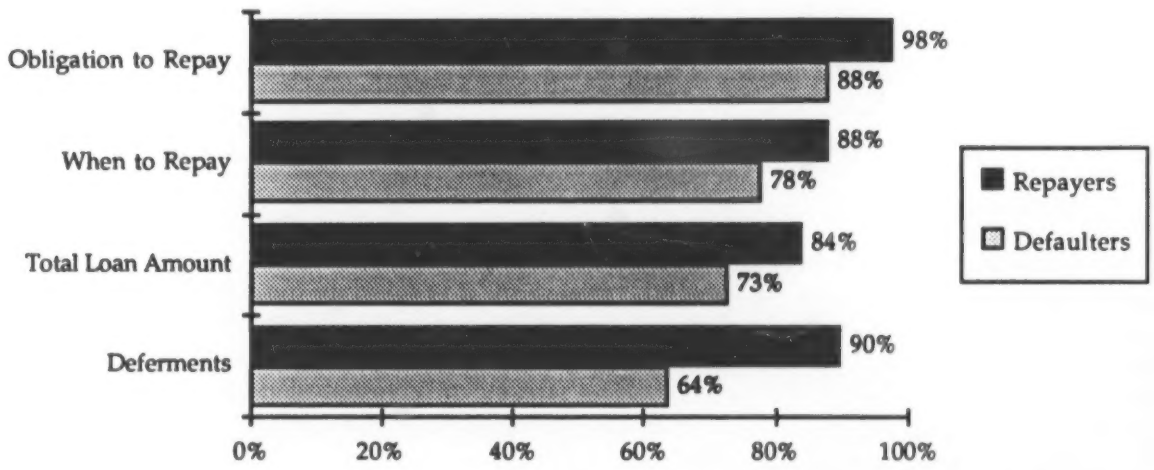


Figure 4.6. Borrower's Knowledge of Loan Program (by school category)



A slightly different pattern emerges when the survey respondents are separated into "repayers" and "defaulters" (figure 4.7). In each case defaulters demonstrated a lower level of understanding of the loan program than did repayers. Over 11 percent of defaulters claimed that they did know they were obliged to repay their student loans; only 2 percent of repayers made this statement. Similarly, whereas only 13 percent of repayers said they did not understand when repayment would begin, 22 percent of defaulters were unaware of the time at which their loans would mature. Defaulters and repayers differed as well in their knowledge of their total loan amount: 27 and 16 percent, respectively, stated that they did not understand the total level of their borrowing. Unfortunately, these differences are only suggestive; the relationships fail to pass statistical significance tests.

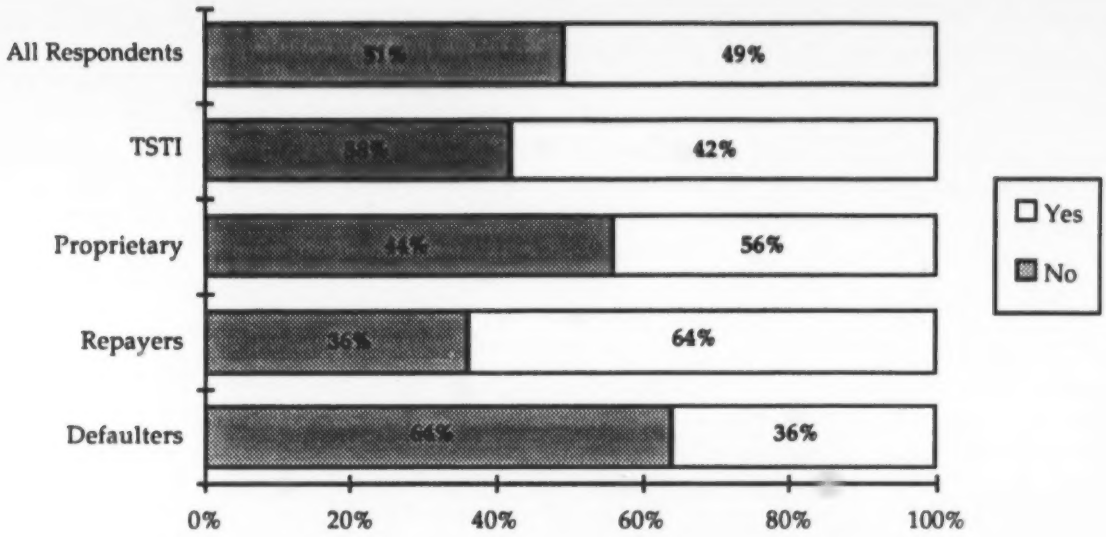
Figure 4.7. Borrower's Knowledge of Loan Program (by loan category)



The most striking comparisons involve awareness of deferments. Over 35 percent of defaulters said they were unaware of the availability of deferments, as compared to only 10 percent of repayers. The distinction between the groups is even more pronounced in terms of whether a respondent had taken a deferment: whereas 64 percent of repayers recalled taking deferments, only 35.6 percent of defaulters responded that they had (figure 4.8). Thus, awareness and use of deferments may have an effect on whether or not a borrower defaults.

The results of this survey shed some light on borrowers' knowledge of the student loan program. For example, there was a high level of knowledge among respondents in all the areas tested. Furthermore, there was little difference between subgroups in most of the questions measuring the respondents' knowledge of their own loans (e.g., awareness of loan amount and repayment timing).

Figure 4.8. Respondents Who Have Had Deferments



One cannot conclude, however, that the high general level of knowledge precluded the necessity of the June 5th regulation. It is possible that our 1988 survey population overlapped the implementation of the regulation. In this case, the awareness demonstrated through the survey may be partially a result of the "counselling" regulation. Furthermore, the survey only assessed the respondents' knowledge about the characteristics of their own loans. The 1989 regulation provides for much more extensive counselling than our survey could examine.

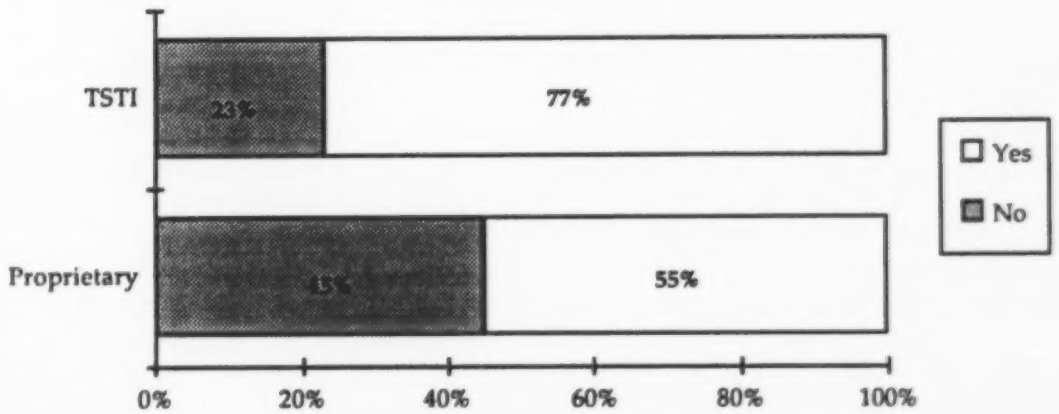
The findings suggest that knowledge and use of deferments are strongly related to whether or not a respondent becomes a defaulter. They also indicate that the institution type (TSTI or proprietary school) is not related to awareness of deferments. In short, over 75 percent of the respondents who claimed to be unaware of deferments were defaulters. Unfortunately, the findings fail to suggest a clear conclusion. It is unclear whether or not defaulters who are unaware of deferments would be eligible for them. Therefore, one can not conclude that a borrower's ignorance of deferments is causally related to whether he or she defaults. The results are nevertheless suggestive. Over 60 percent of the respondents who did not take a deferment defaulted, while only one-third of those who took one defaulted. Since deferments may provide borrowers with the additional time necessary to ready themselves for repayment, the fact that defaulters are more likely than repayers not to use them indicates an area in which the 1989 regulation may have had an important effect.

Effects of Graduation and Employment on Loan Default

The results of the student interviews show that there are very few post-graduation factors that correlate with default. Sixty-six percent of the students graduated from their programs, but graduation had no effect on whether they repaid or defaulted. However, significant correlations occur between loan default and post-graduation unemployment. Several aspects of employment appear to be related to eventual loan repayment or default. Many students relied on the job placement resources of their school to find employment. However, 19 percent of all subjects received no help with job placement, even though most schools advertise their high placement rates.

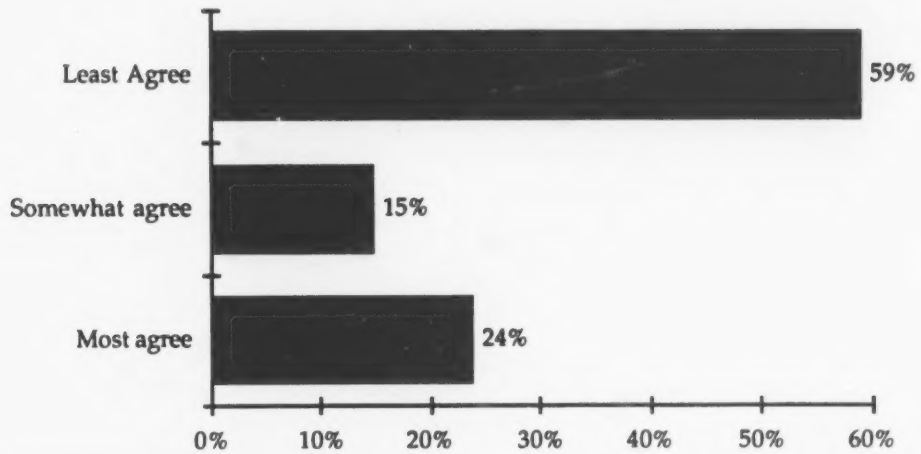
In many trades, employment is contingent on having certain tools and materials. For example an automotive mechanic needs thousands of dollars worth of tools to begin work. Seventy-three percent of the repayers had the tools and materials necessary to begin work. Sixty-three percent of the defaulters had such materials. Furthermore, 77 percent of TSTI students had the tools necessary to begin work, compared to 55 percent of graduates of proprietary schools (figure 4.9). TSTI provides the tools and materials needed for eventual employment more often than proprietary schools.

Figure 4.9. Borrowers Who Have Tools and Materials Necessary to Begin Work (88 respondents)



Seventy percent of all the students answered that they would not have enrolled without aid (figure 4.10). This aid is usually in the form of guaranteed student loans. The 17 percent difference is due to the higher costs of the proprietary school. When asked if they would have attended school without aid, 18 percent responded they would have. More TSTI students said they would have attended without aid (27 percent versus 6 percent for proprietary).

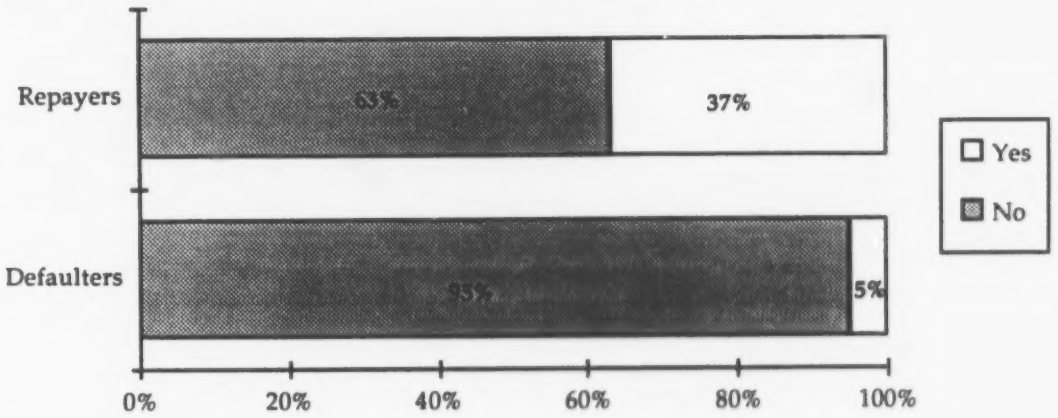
Figure 4.10. Students Who Would Have Enrolled Without Aid (96 respondents)



Eighty-eight percent of all respondents who did not graduate did not receive refunds. This high figure may be due to a combination of factors: students being unaware that they could receive refunds; the schools lack of refund policies; or schools having a very early withdrawal date. There is no statistical correlation between defaulting and not receiving refunds. Most schools have several dates when students can receive partial refunds of their tuition if they have to drop out. The catalogues, acquired by researchers posing as potential proprietary school students, show that there are refund policies. Based on the catalogue survey, the policies generally offer a full refund up to 72 hours after signing a contract (not including weekends). After the 72 hours, schools sampled keep anywhere from $50 to $100. They then offer reimbursement of 90 percent, or one-tenth of the course cost after the first week, 80 percent after the second week, and finally in the third quarter only 10 percent. After a final date, usually in the fourth quarter, there is no tuition reimbursement.

Termination fees do not affect whether a respondent defaulted or not. Eighteen percent of all schools had termination fees (figure 4.11) for leaving early. (These statistics are for those who did not graduate.) Five percent of the defaulter's schools have termination fees, while 37 percent of the repayers do.

Figure 4.11. Termination Fee for Leaving Early (37 respondents)



Exit interviews with students should provide feedback to schools as well as an opportunity for schools to inform students of their loan obligations and about deferments. Only 45 percent of students participated in exit interviews.

There is a correlation between getting a job and repaying loans. Sixty-one percent of those graduating had jobs within three months. Only 42 percent percent of vocational students who had a job within three months of graduation stated they had received the skills necessary to get a job. Fifty-two percent had not received such skills. Many respondents took jobs that were not related to their area of training. Seventy-six percent of repayers had jobs, compared to 44 percent of defaulters (figure 4.12).

Fifty percent of all students said they got jobs related to their training. Sixty-five percent of repayers had jobs related to their schooling (figure 4.13), while 70 percent of those in default did not have jobs related to their training. Students who did not get jobs related to their training reported being unhappy with their education because they thought it was not worth the cost in terms of financial return.

When asked why they are in default (figure 4.14), 21 percent responded "not enough money from job," 18 percent responded "education not worth the cost," 17 responded "no job," and 14 percent responded "other debts." Thirty percent gave a variety of other responses.

Figure 4.12. Respondents Who Received Jobs within Three Months of Leaving Program

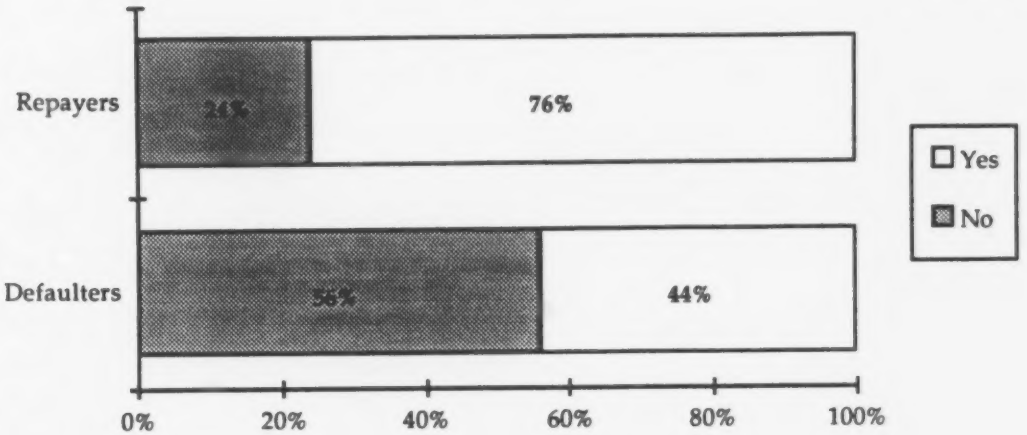


Figure 4.13. Respondents Who Received Jobs Related to Their Training within Three Months of Leaving Program (60 respondents)

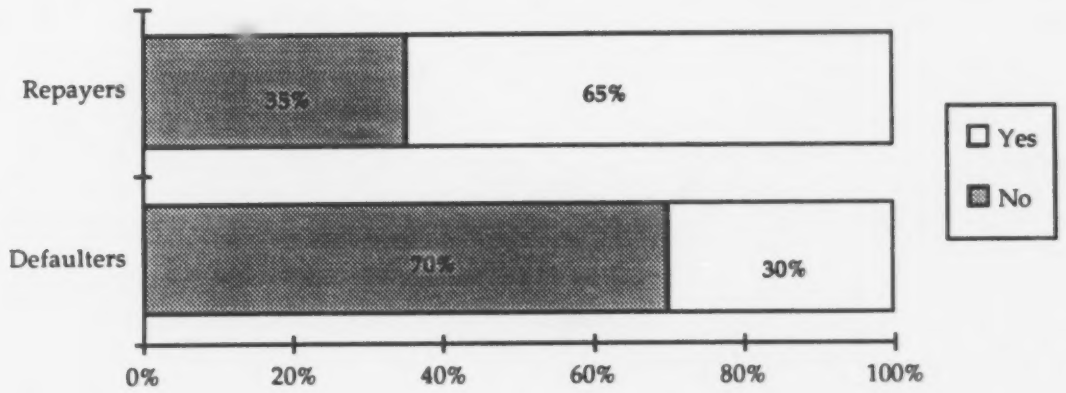
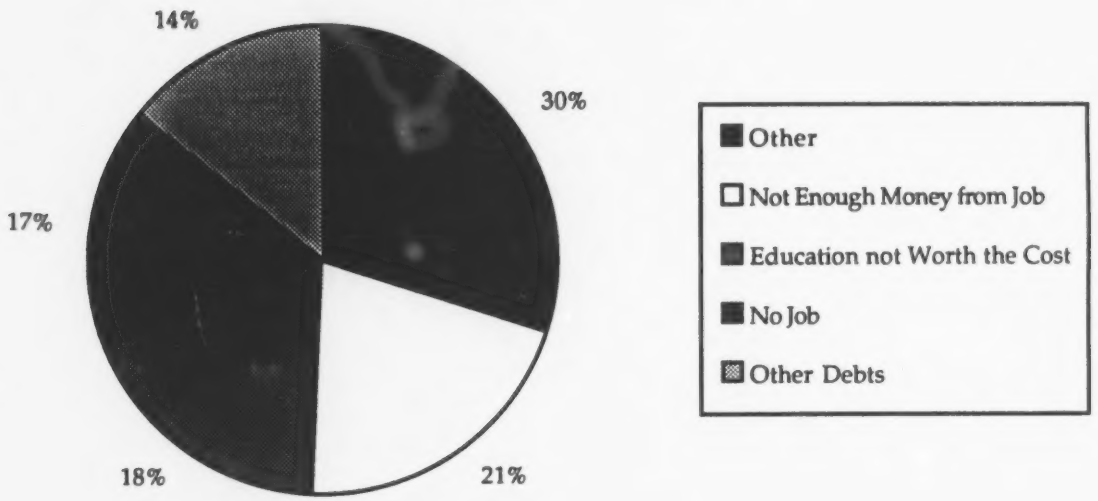


Figure 4.14. Reasons for Defaulting on Loans



Students need jobs to repay their loans. They need to feel their education had value. They need the necessary skills, tools, and materials to seek employment. In meeting these goals, vocational education schools can lower the loan default rate.

Notes

[1]Lawrence E. Gladieux, ed., *Radical Reform or Incremental Change? Student Loan Policy Alternatives for the Federal Government* (New York: College Board, 1989), p. 2.

[2]Ibid., pp. 2-3; and Thomas G. Mortenson, *The Reallocation of Financial Aid From Poor to Middle Income and Affluent Students 1978 to 1990* (Iowa City: ACT Publications, 1990), pp. 1-3.

[3]See, for example Gladieux, *Radical Reform or Incremental Change?* Also see Thomas G. Mortenson, *Family Income, Children, and Student Financial Aid* (Iowa City: ACT Publications, 1989); Thomas G. Mortenson, *Missing College Attendance Costs: Opportunity, Financing, and Risk* (Iowa City: ACT Publications, 1989); Thomas G. Mortenson, *The Impact of Increased Loan Utilization Among Low Family Income Students* (Iowa City: ACT Publications, 1989); Thomas G. Mortenson, *Reallocation of Financial Aid* (Iowa City: ACT Publications, 1989).

[4]Joseph M. Cronin, *Student Loan: Risks and Reality* (Dover, 1987), p. 68.

[5]Ibid.

[6]Robert Lyke, Thomas Gabe, and Steven R. Aleman, *Early Labor Market Experiences of Proprietary School Students* (Washington, D.C.: Congressional Research Service, 1991), p. iv.

[7]Cronin, *Student Loan: Risks and Reality*, p. 68.

[8]Ibid., p. 70.

[9]Michael S. McPherson, "Summary of the Ideas," in *Radical Reform or Incremental Change? Student Loan Policy Alternatives for the Federal Government*, ed. Lawrence E. Gladieux (New York: College Board, 1989), p. 150.

[10]David W. Breneman, "The Outlook for Change," in *Radical Reform or Incremental Change? Student Loan Policy Alternatives for the Federal Government*, ed. Lawrence E. Gladieux (New York: College Board, 1989), p. 150.

[11]Ibid., p. 152; and Lyke et al., *Early Labor Market Experiences*, ed. Lawrence E. Gladieux (New York: College Board, 1989), p. 132.

[12]Barry P. Bosworth, "Comments," in *Radical Reform or Incremental Change? Student Loan Policy Alternatives for the Federal Government*, ed. Lawrence E. Gladieux (New York: College Board, 1989), p. 132.

[13]Ibid.

[14]Lyke et al, *Early Labor Market Experiences*, pp. 21, 32-35.

[15]Lyke et al, *Early Labor Market Experiences*, pp. 21, 32-35. Weights are added to adjust for sampling problems to make the data more representative of the population. A basic weight is added to represent the probability of selection in the sample. This weight is adjusted for sampling situations and failure to obtain interviews. A two-stage process is then used to adjust the sample distribution to the known distributions of the entire population.

[16]Note the site visit report to the Southwest School of Business and Technical Careers. The representative told the researcher if the applicant had no high school diploma, testing would be required. However, the letterboard outside the school also offered free GED classes.

Chapter 5. Concluding Remarks

The educational systems in Japan and the United States are distinctively different in several ways. These differences reflect the divergent cultural patterns, philosophies of education, and basic structures of government in both countries. Due to such differences, it is not always reasonable, or even possible, to import successful educational strategies from other cultures into our own. However, international comparisons do suggest alternatives to improve the way we educate our labor force. This study places emphasis on understanding the structure of vocational education in the two countries. It also focuses on different patterns for funding education in Japan and the United States. In conclusion, therefore, it seems appropriate to draw American policymakers' attention to three sets of significant differences affecting the quality of vocational education in both countries.

• **Differences in degree of national regulation.** The national government strictly regulates practically all aspects of Japanese education. For instance, it gives nationally standardized achievement tests to all Japanese students. Such exams ensure a relatively uniform level of competency for all graduates of training programs in Japan. The United States, on the other hand, is characterized by relatively low levels of federal intervention. Here, neither the measurement of achievement levels for students, nor the training programs themselves are regulated systematically by the national government. Thus, there is wide variation in student competency across the United States.

• **Differences in educational components.** The Japanese include academic components in the education of vocational workers. About 50 percent of the material covered by vocational students is on general academic subjects. In the United States, vocational programs focus largely on specific technical skills. American employers, nevertheless, report that basic academic and personal skills are essential in today's workplace. In fact, skill requirements are increasing and technologies are changing so quickly that workers must keep learning new skills throughout their careers. Employers therefore provide almost constant education training and retraining. This training is accomplished more easily when the workers already have acquired appropriate basic skills and attitudes toward learning.

• **Differences in financial assistance.** The Japanese government provides financial assistance directly to educational institutions. Institutions then require lower tuition rates from students. In the United States, financial aid more often goes directly to the student in the form of loans and, less frequently, grants. Unlike Japan, the United States supplies a significant amount of educational assistance through government guaranteed loans. The amount of aid received by a U.S. institution thus depends, in large part, on the eligibility of enrolled students for federal assistance.

There are several reasons people do not repay their loans. Many people do not repay because of a general perception that the education they received was not worth the money. Other people do not repay because they did not find a job in their field of training, or, if they did find a job, the pay was low. In any event, the high rate of failure to repay student loans heavily burdens the system that provides them in the first place.

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Appendix A. Questionnaire

CODE NUMBER:

Name: Last:

First:

M.I.

Social Security Number:

Address:

Phone number:

Date of birth:

Citizenship status (at the time of loan application):
U.S.Citizen
U.S. Permanent Resident
Other: _____

School attended:

Loan amount:

Program length in days:

Lender:

Status of loan:

CODE NUMBER:

Hello, may I speak with _____ , please?

Hello, my name is_____. I'm a student from the LBJ School of Public Affairs at The University of Texas at Austin. We're doing a survey to explore issues in vocational education in Texas. We are interviewing people like you who have taken loans to attend a vocational school. Your responses will contribute to improvements in the vocational education system. Your name was randomly

selected from state lists of loan recipients. Your responses will represent hundreds of loan recipients like you, so your cooperation is very important. We will hold your responses strictly confidential. Your name will not be used, and the information will be for statistical purposes only. Your name does not appear on the survey. This survey has seven short sections and should take about ten minutes.You did have a loan while you were attending, is that right?

[Section 1:] I'd like to begin with a few background questions.

1. What is your marital status?
    1. Single
    2. Married
    3. Separated
    4. Divorced
    5. Widowed
    9. No answer

2. What is your gender?
    1. Female
    2. Male

3. What is your racial or ethnic group?
    1. African-American
    2. Asian/Pacific Islander
    3. Caucasian
    4. Hispanic
    5. Native American
    8. Other
    9. No answer

4. Including you, how many adults 18 or over currently live in your household?

5. How many children under age 18 currently live in your household?

6. Excluding yourself, how many dependents do you have?

7. How many years of education beyond kindergarten have you completed (in years):

8. Are you a high school graduate or GED holder? [IF ASKED, a GED is high school equivalency.]

1. Yes
2. No
9. No answer

9. Are you currently employed?
1. Yes
2. No
9. No answer

10. IF YES, how many hours did you work last week?

11. IF NO, are you seeking employment?
1. Yes
2. No
9. No answer

12. What do you estimate your total annual personal income from all sources will be this year? I will read you some income categories. Stop me when I reach yours.
1. $0-$5,000
2. $5,001-$10,000
3. $10,001-$15,000
4. $15,001-$20,000
5. $20,001-$25,000
6. $25,001-$30,000
7. $30,001-$40,000
8. Above $40,000
9. No answer

13. What do you estimate your total annual household income from all sources will be this year? I will read you some income categories. Stop me when I reach yours.
1. $0-$5,000
2. $5,001-$10,000
3. $10,001-$15,000
4. $15,001-$20,000
5. $20,001-$25,000
6. $25,001-$30,000
7. $30,001-$40,000
8. Above $40,000
9. No answer

[Section 2:] Next I'd like to learn how you heard about _____.

14. Which of the following is the most important reason you wanted to go to a vocational school?
    1. Higher income/better job
    2. Funds were available
    3. Benefits, such as Veterans' benefits, were available
    4. Hearing about it through an advertisement
    8. Other:
    9. No answer

15. How did you first hear of [name of school]?
    1. Media (newspaper, radio/TV)
    2. Poster or billboard (i.e., bus station)
    3. Friend or relative
    4. Mailed flyer
    5. School counselor
    6. Telephone solicitation
    7. Job fair
    8. Other:
    9. No answer

16. Did you consider training from someplace other than a vocational school?
    1. Yes
    2. No
    9. No answer

[Section 3:] Now I will ask questions about your first contact with the school.

17. For what occupation was the vocational school offering to prepare you?

18. When you applied did the school tell you the total cost of the program?
    1. Yes
    2. No
    9. No answer

19. Were you offered a student loan to enable you to attend?
    1. Yes
    2. No
    9. No answer

20. Did your student loan cover all tuition costs?
    1. Yes
    2. No
    9. No answer

21. Did a school representative tell you that you would get a job?
    1. Yes
    2. No
    9. No answer

22. Did the school test your ability for any of the following skills?

    Math
    1. Yes
    2. No
    9. No answer

23. Reading and English skills
    1. Yes
    2. No
    9. No answer

24. Other:
    1. Yes
    2. No
    9. No answer

25. At your school was remedial assistance available in any of these areas?

    Math [Note: Remedial = Help with basic skills]
    1. Yes
    2. No
    9. No answer

26. Reading
    1. Yes
    2. No
    9. No answer

27. Other:
    1. Yes
    2. No
    9. No answer

28. Were job placement services available at your school?
    1. Yes
    2. No
    9. No answer

29. Did the school support other kinds of assistance during the program such as:

    Books and materials
    1. Yes
    2. No
    9. No answer

30. Child care
    1. Yes
    2. No
    9. No answer

31. Counseling
    1. Yes
    2. No
    9. No answer

32. Health insurance
    1. Yes
    2. No
    9. No answer

33. Transportation
    1. Yes
    2. No
    9. No answer

34. Tutoring
    1. Yes
    2. No
    9. No answer

35. Other:
    1. Yes
    2. No
    9. No answer

36. Did the school ask you to sign a contract the day of your first visit?
    1. Yes
    2. No
    9. No answer

37. To complete your program, how many hours of instruction did the school require?

[Section 4:] Now I would like to know how you learned about guaranteed student loans.

38. At the time you applied, who explained what a guaranteed student loan was?
    1. School representative
    2. Bank representative
    3. Nobody
    8. Other:
    9. No answer

39. At the time you applied, did you understand that you would have to pay back the loan?
    1. Yes
    2. No
    9. No answer

40. IF YES: At the time you applied did you know when you would have to start repaying your loan(s)?
    1. Yes
    2. No
    9. No answer

41. At the time you applied, did you know the total dollar amount of your guaranteed student loan(s) for the program?

1. Yes
2. No
9. No answer

42. Do you know what a student loan deferment is? [Phone no. 512-837-0208]

1. Yes
2. No
9. No answer

43. Have you ever had a student loan deferment?

1. Yes
2. No
9. No answer

[Section 5:] Now I would like to find out more about the instructors and the content of the program. We want your opinion on how worthwhile the program was.

44. Which of the following materials did you use in the program.

Books and workbooks

1. Yes
2. No
9. No answer

45. Equipment and tools

1. Yes
2. No
9. No answer

46. Classroom

1. Yes
2. No
9. No answer

47. Did you purchase any materials for the program?

1. Yes
2. No
9. No answer

48. Did you have to purchase any materials from the school or pay an equipment fee?

1. Yes
2. No
9. No answer

49. At the end of the program, did you have the materials you needed to begin work in your trade?

1. Yes
2. No
9. No answer

I will now read several statements to you. Please tell me the extent of your agreement with these statements on a scale from 1 to 7. Think of the scale as a thermometer where a "7" means the strongest level of agreement and a "1" means the least level of agreement.

50. At the beginning of your program, the school did a good job of assessing your skills and abilities.

1 2 3 4 5 6 7 9-no answer

51. The instructors did a good job teaching your program.

1 2 3 4 5 6 7 9-no answer

52. This program helped prepare you for a career in the trade you wanted to enter.

1 2 3 4 5 6 7 9-no answer

53. The school encouraged you to complete the program.

1 2 3 4 5 6 7 9-no answer

54. The school helped you find a job.

1 2 3 4 5 6 7 9-no answer

55. This program was too long.

1 2 3 4 5 6 7 9-no answer

56. You would have enrolled in this program even without financial aid.

1 2 3 4 5 6 7 9-no answer

[Section 6:] Now I will ask a few questions about completing the program.

57. Did you graduate from your vocational program?
1. Yes
2. No
9. No answer

58. IF NO, why not?

59. IF NO: Did you receive a refund?
1. Yes
2. No
9. No answer

60. IF NO: Was there a termination fee for leaving the program before completion?
1. Yes
2. No
9. No answer

61. Was there an exit interview when you left the program?
1. Yes
2. No
9. No answer

62. Were you required to pass an applied skills test prior to graduating?
1. Yes
2. No
9. No answer

63. Did the program give you the skills necessary to find a job at the salary level you anticipated?
1. Yes
2. No

3. I don't know
9. No answer

[Section 7:] Now I want to ask about what happened after the training program.

64. Did you get a job within the first three months after leaving school?
1. Yes
2. No
9. No answer

65. IF YES: Was the job related to the training you received at the school?
1. Yes
2. No
9. No answer

66. IF YES: Did your training provide you with the skills needed to perform well on the job?
1. Yes
2. No
9. No answer

ONLY IF IN DEFAULT:
67. There are a number of reasons for defaulting on a loan. If you are in default, which of the following was the most important reason for you?
1. You do not have a job
2. Your job does not provide enough income
3. The education you received was not worth the loan
4. Other debts
5. Other:

Thank you very much for your cooperation. Goodbye.

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